

reach the observer at almost precisely the moment that this squall-cloud passes overhead, for under these circumstances the upward motion has hardly begun before the upper layers of moist air are supersaturated.

We must avoid the conclusion that the advancing edge of the squall-cloud indicates a wind of the same velocity, moving in a like direction. In all probability it denotes rather the progress of a condition of hygrometric change.

While the cloud as a whole is advancing its component parts may often be seen to move backwards.

Behind the advancing edge of the squall-cloud comes a churning mass of conflicting cold, gray clouds, and then the descending sheets of rain or hail, and the loudest thunder, with lightning striking the earth.

The lower surface of cloud, on the rear side of the storm, is a uniformly ascending stratus or cumulo-stratus sheet, sometimes flecked with scattered particles of fracto-cumuli, or "scud," at a low level, produced by evaporation of the fallen water from a soil still warm, with almost immediate condensation of the vapor.

The level of the cloud increases in the rear, because the descending air has been depleted of its moisture in the region of heavy precipitation and is too dry to permit cloud at a low level, while the dryness progressively increases behind, as masses of air which have been thrown up to greater heights begin to descend.

LUMPS OF ICE AS HAILSTONES.

From Mr. S. M. Blandford, temporarily in charge of the Weather Bureau office in Portland, Oreg., there was received too late for the June REVIEW a report of the tornado that occurred June 3, 1894, passing northeastward through the counties of Harney, Grant, and Union, in eastern Oregon. He states that the most novel feature was the hail. One correspondent states that the formation was more in the nature of sheets of ice than simple hailstones. The sheets of ice averaged 3 to 4 inches square and from three-fourths of an inch to $1\frac{1}{2}$ inches in thickness. They had a smooth surface and in falling gave the impression of a vast field or sheet of ice suspended in the atmosphere and suddenly broken into fragments about the size of the palm of the hand. During the progress of the tornado at Long Creek a piano was taken up and carried about a hundred yards.

OBSERVATIONS AT HONOLULU, HAWAIIAN ISLANDS.

As the weather on the Pacific coast depends so largely upon the conditions of the atmosphere to the westward, it is considered important to publish in full and as soon as prac-

ticable the data furnished by observers in Alaska, the Hawaiian Islands, and adjacent regions.

Meteorological observations at Honolulu, Republic of Hawaii, July, 1894, by Curtis J. Lyons, Meteorologist to the Government Survey.

Date.	Barometer at sea level.			Temperature.			Humidity.			Wind.			Cirruscloud moving from—	Rain to 6 a. m.
	9 a. m.	3 p. m.	9 p. m.	6 a. m.	2 p. m.	9 p. m.	Minimum.	Maximum.	Relative.	Absolute.	Direction.	Force.		
	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	○	○	○	○	○	8	74	6.6	ne.	4	<i>Ins.</i>
1..	30.14	30.11	30.15	71	77	74	70	80	67	74	6.6	ne.	4	0.01
2..	30.17	30.14	30.20	73	79	75	71	82	63	71	6.7	ne.	5	0.06
3..	30.21	30.16	30.22	74	80	74	72	82	58	70	6.2	ne.	5	0.01
4..	30.20	30.15	30.19	72	79	71	71	81	67	77	6.2	ne.	5	0.16
5..	30.16	30.10	30.14	72	76	71	71	79	73	76	6.7	ne.	5	0.16
6..	30.15	30.10	30.15	72	79	74	70	87	69	67	6.1	ne.	5	0.07
7..	30.14	30.06	30.15	73	80	74	72	82	67	77	6.7	ne.	5	0.00
8..	30.15	30.09	30.14	73	80	74	72	83	63	74	6.8	ne.	5	n. 80 W. 0.04
9..	30.17	29.07	30.13	73	80	75	72	81	74	67	6.7	ne.	5	n. 80 W. 0.10
10..	30.13	30.06	30.13	73	81	74	73	83	63	72	6.3	nne.	4	0.03
11..	30.12	30.05	30.13	70	81	75	67	83	71	72	7.0	s. nne.	3	8.40 W. 0.00
12..	30.16	30.09	30.17	75	81	76	74	84	59	66	6.4	nne.	3	0.00
13..	30.17	30.09	30.16	75	82	74	74	84	59	70	6.3	ene. nne.	3	0.00
14..	30.12	29.06	30.10	70	76	74	69	81	62	66	6.2	ene. nne.	3	0.00
15..	30.07	30.01	30.08	73	80	74	72	82	56	70	6.3	ne.	3	0.02
16..	30.08	30.03	30.07	72	80	74	70	82	65	70	6.3	nne.	4	0.05
17..	30.10	30.06	30.12	72	82	74	70	84	63	74	6.7	ne.	4	0.05
18..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
23..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
26..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
28..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mean	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

The barometer is corrected for temperature and reduced to sea level, but the gravity correction, —0.06, is still to be applied.

The absolute humidity is expressed in grains of water, per cubic foot, and is the average of four observations daily.

The rain is measured at 6 a. m., daily.

The extremes of the force of the wind are given when it has varied more than usual. Sth. lava rose in crater of Kilauea and overflowed. 11th, slight earthquake disturbance. Breakdown in floor of crater, fall of 270 feet in twelve hours.

METEOROLOGICAL TABLES.

[Prepared by the Division of Records and Meteorological Data.]

The following pages present in tabular form the climatological data for the current month, on which the text of the preceding part of this REVIEW has, to a large extent, been based.

For a detailed description of the methods of observation, compilation, and computation relating to these tables, the reader is referred to page 129 of the MONTHLY WEATHER REVIEW for March, 1894. The general contents of the tables are as follows:

Table I gives for 140 Weather Bureau stations, making two observations daily, and for 10 others making only one observation, the ordinary climatological data.

Table II gives for about 2,200 stations, occupied by voluntary observers, the mean and extreme temperatures and the total precipitation.

Table III gives climatological data for about 30 Canadian stations.

Table IV a gives for 38 Weather Bureau stations the percentages of sunshine for each hour of local mean time.

Table IV b gives for 43 Weather Bureau stations the total hourly rainfall for each hour of seventy-fifth meridian time.

Table V gives for 81 stations the mean temperatures for each hour of seventy-fifth meridian time.

Table VI gives for 66 stations the mean pressures for each hour of seventy-fifth meridian time.

Table VII gives for 138 stations the mean hourly movement of the wind.

Table VIII gives for 68 stations the resultant movements and directions of the wind from continuous registrations.

Table IX gives for 140 stations the component and resultant directions based on simultaneous observations at 8 a. m. and 8 p. m., seventy-fifth meridian time.

TABLE I.—Climatological data for Weather Bureau Stations, July, 1894.

Districts and stations.	Elevation above sea-level, feet.		Pressure, in inches.		Temperature of the air, in degrees Fahrenheit.				Humidity and precipitation.			Wind.		Mean temperature data since opening of station.					
	Length of record, years.		Mean pressure, S. a. m. and 8 p. m. + 2.	Mean reduced.	Departure from normal.	Mean max. and min. + 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Greatest daily range.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Prevailing direction.	Maximum velocity.	Cloudy days, average tenths.	Highest for month.	
																Miles per hour.	Clear days.	Year.	
New England.																			
Eastport.	76	22	29.86	29.95	+ .03	69.9	+ 1.4	91	29	70	46	11	51	29	85	1.37	2.4	19	48.8
Portland.	103	23	29.84	29.94	+ .02	69.8	+ 1.8	97	28	79	53	12	57	33	80	1.21	3.1	10	62.2
Northfield.	872		29.85	29.93	+ .02	67.2	+ 2.0	93	19	79	53	12	57	33	80	2.96	0.8	8	5.9
Boston.	125	24	29.85	29.93	+ .02	73.7	+ 1.9	97	28	82	56	12	57	27	70	1.64	3.1	13	4.3
Nantucket.	14	8	30.00	30.02	- .08	86.7	+ 0.9	85	31	75	58	12	57	27	87	3.09	0.5	11	5.1
Woods Hole.						69.6	+ 1.4	83	26	74	58	10	63	19	64	0.29	2.7	3	7.4
Vineyard Haven.						73.6	+ 3.0	91	29	81	58	10	63	23	66	0.68	2.7	3	7.0
Block Island.	27	14	29.98	30.01	+ .04	69.6	+ 0.8	84	26	75	57	9	63	24	85	1.47	1.4	5	9.9
Narragansett Pier.	13					71.2	+ 1.0	87	29	79	52	9	63	24	85	0.22	3.0	4	11.343
New Haven.	107	22	29.87	29.98	+ .05	73.1	+ 1.8	94	13	83	50	10	63	25	66	2.40	3.1	5	5.5
New London.	45	24	29.97	30.02	+ .05	71.0	+ 1.9	90	29	80	53	8	64	21	82	0.44	3.0	5	4.570
Mid. Atlantic States.						76.5	+ 0.4	90	26	75	57	9	63	25	65	3.28	2.0	2	4.74
Albany.	85	21	29.90	29.99	+ .06	74.6	+ 1.6	97	*	85	54	8	64	30	63	7.2	2.96	1.0	14
New York, N. Y.	185	24	29.81	30.00	+ .02	76.1	+ 2.3	96	28	85	58	10	66	25	69	2.89	1.0	10	6.4
Harrisburg.	377	7	29.62	30.02	+ .03	76.0	+ 3.1	96	28	85	52	10	66	23	67	1.80	2.4	6	4.417
Philadelphia.	117	24	29.90	30.02	+ .03	77.8	+ 1.7	97	28	87	58	8	69	24	64	0.75	3.8	7	6.880
Atlantic City.	53	21	29.98	30.03	+ .05	70.3	+ 1.9	97	12	75	56	10	63	23	85	0.15	3.3	6	7.682
New Brunswick.						76.8	+ 0.0	100	25	83	50	10	63	32	68	2.43	3.0	8	3.0
Baltimore.	179	24	29.83	30.02	+ .04	77.6	+ 1.0	97	*	87	56	10	68	26	64	1.73	3.2	9	4.960
Washington, D. C.	112	24	29.92	30.03	+ .04	77.9	+ 0.3	97	13	84	54	10	68	29	64	2.14	2.5	9	4.004
Cape Henry.						77.5	+ 0.1	97	13	85	59	11	60	27	69	1.78	1.4	13	5.044
Lynchburg.	685	24	29.34	30.06	+ .06	77.2	+ 1.3	95	13	83	59	9	66	61	69	4.87	2.2	14	2.621
Norfolk.	57	24	29.99	30.05	+ .04	78.4	+ 0.7	94	27	87	55	9	70	26	69	8.01	2.4	12	6.100
S. Atlantic States.						78.8	+ 0.8	95	21	89	52	9	70	26	81	8.41	2.4	14	7.413
Charlotte.	773	16	29.26	30.07	+ .03	75.8	+ 3.1	93	14	86	59	11	68	28	75	4.99	1.0	12	3.684
Hatteras.	11	14	30.08	30.09	+ .06	77.6	+ 0.3	88	30	82	62	12	73	12	82	9.65	3.5	12	8.305
Kitty hawk.	9	20	30.03	30.01	+ .03	76.9	+ 1.7	90	14	83	62	11	71	21	81	8.59	3.0	12	8.599
Raleigh.	388	8	29.66	30.07	+ .03	77.4	+ 0.9	93	8	87	53	11	68	29	78	6.33	1.5	13	3.153
Southport.	34	19	30.05	30.09	+ .05	76.8	+ 0.8	95	28	83	61	12	72	19	83	7.33	0.6	16	8.238
Wilmington.	78	24	30.01	30.09	+ .06	77.6	+ 2.5	91	7	84	62	11	71	20	74	9.03	1.8	15	5.428
Charleston.	52	24	30.04	30.09	+ .05	78.8	+ 3.9	91	4	85	64	10	73	20	82	11.28	3.9	15	5.849
Columbia.						78.8	+ 2.5	97	14	88	59	11	70	26	75	5.01	0.4	18	3.0
Augusta.	209	23	29.88	30.10	+ .06	77.8	+ 4.4	92	5	86	60	10	70	23	70	9.93	4.9	18	3.040
Savannah.	98	24	29.99	30.09	+ .04	79.2	+ 3.0	94	5	87	66	11	71	21	72	13.18	8.1	23	5.325
Jacksonville.	43	23	30.04	30.09	+ .04	80.5	+ 2.1	93	21	89	68	30	72	22	72	7.90	5.1	21	5.813
Florida Peninsula.						80.6	+ 1.8	93	21	89	68	30	72	22	72	5.91	1.0	14	7.581
Jupiter.	28	7	30.07	30.10		79.8	+ 2.5	90	21	86	70	28	74	16	84	3.06	2.5	14	5.422
Key West.	22	24	30.09	30.11	+ .05	82.4	+ 2.0	90	8	88	72	1	77	16	72	2.30	2.1	11	4.920
Tampa.	36	15	30.06	30.10		81.1	+ 0.9	93	6	89	81	11	50	22	73	11.50	1.2	22	4.054
Titusville.	44	8	30.07	30.11		80.1	+ 2.0	93	6	88	69	1	73	23	73	6.18	0.7	21	7.345
Eastern Gulf States.						78.7	+ 2.7									6.93	+ 1.6	7	2.29
Atlanta.	1,131	16	28.92	30.09	+ .02	76.2	+ 2.2	93	4	85	58	11	67	24	66	5.55	1.1	14	5.060
Pensacola.	56	15	29.93	30.04	+ .01	79.0	+ 2.7	93	2	88	62	2	72	27	60	6.17	0.6	13	6.193
Mobile.	57	24	30.00	30.08	+ .02	79.5	+ 2.5	95	2	87	63	3	72	22	71	5.91	0.5	17	4.477
Montgomery.	257	22	29.79	30.05	+ .02	79.8	+ 2.4	93	4	89	64	10	70	27	68	4.38	+ 0.1	17	3.852
Meridian.	358	22	29.68	30.05		76.9	+ 0.9	98	3	87	64	21	66	30	68	7.69	+ 0.6	16	3.160
Vicksburg.	254	23	29.77	30.03	- .02	78.6	+ 3.3	100	1	88	62	10	70	26	69	7.99	+ 3.9	14	3.887
New Orleans.	54	24	30.00	30.05	+ .03	79.2	+ 3.4	99	1	86	67	11	73	23	70	7.7	+ 5.1	21	4.230
Port Eads.						80.3	+ 2.5									6.06	+ 2.1	0	13
Western Gulf States.						80.3	+ 2.5									4.20	+ 1.1	18	.....
Shreveport.	249	23	29.77	30.03	+ .01	79.9	+ 3.8	101	1	90	63	10	70	27	68	3.09	- 0.6	6	3.766
Fort Smith.	492	13	29.52	30.12	+ .01	80.1	+ 1.4	105	23	93	58	23	67	37	64	1.51	- 2.2	6	4.074
Little Rock.	302	16	29.72	30.11	+ .01	78.6	+ 2.8	103	1	89	60	9	68	29	66	7.2	- 2.1	11	4.477
Corpus Christi.	20	8	30.00	30.02	+ .00	81.0	+ 1.8	98	2	87	70	14	75	24	74	8.1	- 2.8	9	3.131
Galveston.	42	24	30.02	30.03	+ .03	81.3	+ 3.3	97	2	86	69	10	77	17	72	6.34	- 3.2	12	3.352
Palestine.	511	12	29.52	30.05	+ .02	80.3	+ 1.5	103	2	92	63	10	70	29	70	7.7	- 2.7	12	2.722
San Antonio.	679	16	29.34	30.04	+ .04	81.0	+ 0.9	106	2	95	67	10	73	29	63	0.66	- 2.3	2	4.302
Ohio Val. & Tenn.						76.6	+ 2.1	94	2	86	59	8	67	28	64	2.13	- 2.0	0	3.287
Chattanooga.	762	16	29.29	30.05	+ .01	76.6	+ 2.1	94	2	86	59	8	67	28	64	3.09	- 0.6	6	3.723
Knoxville.	980	24	29.05	30.09	+ .01	75.7	+ 2.8	99	1	88	52	9	69	27	68	3.24	- 1.6	6	3.823
Memphis.	330	24	29.72	30.06	+ .04	78.4	+ 2.8	99	1	88	52	9	69	27	74	3.27	- 0.1	8	3.655
Nashville.	553	24	29.48	30.05	+ .05	76.6	+ 2.9	96	2	86	59	11	67	29	63	5.45	- 1.1	15	2.999
Lexington.	989	10	29.10	30.03	+ .02	75.6	+ 0.1	93	2	86	55	8	65	26	60	6.82	- 0.7	13	3.170
Louisville.	525	23	29.49	30.04	+ .04	78.1	+ 0.7	96	2	89	57	6	57	30	60	5.41	- 3.5	13	3.714
Indianapolis.	766	24	29.30	30.03	+ .02	76													

TABLE I.—*Climatological data for Weather Bureau Stations, July, 1894—Continued.*

Districts and stations.	Elevation above sea-level, feet.	Length of record, years.	Pressure, in inches.		Temperature of the air, in degrees Fahrenheit.								Humidity and precipitation.				Wind.			Mean temperature data since opening of station.			
			Mean pressure, 8 a.m., p.m., and 8 p.m. + 2	Mean reduced.	Departure from normal.	Mean max. and min. + 2	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean temp- erature of the dew-point.	Days with .01, or more.	Total move- ment, miles.	Miles per hour.	Maximum velocity.	Average cloudiness, tenths.	Highest for month.		
			Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Mean.	Clear days.	Cloudy days.			
Up. Miss. Val.—Con.																							
Dubuque	22	....	77.0 + 4.7	102	26	91	50	7	63	36	....	....	0.02	4.9	1	....	n.	28	1	2	78.3 1874	68.8 1891	
Kookuk	613	23	29.38 30.01 + .04	78.0 + 0.8	102	26	90	56	22	68	36	59	55	0.37	3.9	2	4,562	w.	28	21	9	1 2.5 81.5 1876	70.6 1891
Oairo	359	24	29.66 30.04 + .05	77.0 - 2.0	95	1	86	62	24	68	26	63	67	1.92	1.7	8	4,528	s.	30	13	16	2 3.6 82.5 1874	74.8 1891
Springfield, Ill.	644	16	29.38 30.04 + .04	76.5 - 0.7	98	26	85	54	22	65	33	56	53	2.05	0.2	3	4,758	s.	30	12	10	9 4.9 81.0 1871	71.0 1891
Hannibal	534	....	29.47 30.02 + .04	77.0 - 0.1	100	26	90	51	22	64	39	58	55	1.07	4	4	5,536	s.	29	8	27	3 4.3 83.0 1871	73.0 1891
Saint Louis	571	24	29.44 30.03 + .04	76.1 - 0.3	98	26	89	61	22	69	29	59	53	1.98	- 2.1	8	6,609	s.	40	14	14	3 3.8 83.7 1887	73.8 1882
<i>Missouri Valley.</i>																							
Columbia	....	....	77.2 + 1.0	105	25	92	50	23	62	44	....	....	1.20	- 2.0	5	3,469	s.	21	sw.	19	14 11 6 4.4 80.5 1890	72.4 1891	
Kansas City	963	7	29.05 30.04 + .07	78.0 - 1.7	99	24	87	61	22	67	31	60	60	2.35	+ 0.5	5	5,197	se.	35	nw.	4	14 3.3 80.5 1890	72.4 1891
Springfield, Mo.	1,336	8	28.67 30.05 + .06	75.0 - 3.0	97	1	85	56	9	65	28	60	65	2.91	- 1.6	5	5,724	se.	42	sw.	19	12 15 4 3.9 79.0 1888	72.2 1891
Topeka	....	....	76.9 - 0.1	101	26	88	58	22	65	37	....	....	2.68	- 2.2	5	....	s.	....	....	....	9 3.3 79.6 1874	71.3 1891	
Omaha	1,123	24	28.87 30.01 + .04	77.4 + 0.3	106	26	88	59	15	60	29	55	50	0.61	- 4.7	5	5,393	se.	28	s.	26	19 9 3 3.1 79.6 1874	71.3 1891
Valentine	2,613	9	27.32 29.94 + .02	75.1 - 2.0	103	26	89	50	20	62	42	51	50	0.97	- 2.1	5	7,100	s.	29	21	1 4.5 75.7 1886	67.8 1891	
Sioux City	1,165	....	28.79 29.97 + .01	76.0 - 0.1	107	26	89	48	7	63	37	54	51	1.81	....	5	7,252	s.	38	ne.	31	16 13 2 3.3 80.0 1890	71.3 1891
Pierre	1,470	20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Euron	1,310	14	28.59 29.94 - .00	75.6 + 3.4	103	11	93	47	13	58	47	51	47	0.23	- 3.7	6	8,797	se.	60	rw.	11	14 16 1 3.8 75.6 1894	69.3 1884
<i>Northern Slope.</i>																							
Havre	2,477	14	27.38 29.89 + .01	69.6 + 1.7	97	22	87	42	2	52	48	42	41	0.38	- 1.8	5	5,152	nw.	44	nw.	25	21 10 0 2.9 74.1 1886	63.9 1884
Miles City	2,374	17	27.50 29.88 + .01	74.7 + 1.0	103	24	89	48	1	60	44	44	40	0.27	- 1.1	5	3,528	nw.	30	w.	25	19 10 2 2.4 82.4 1886	67.2 1883
Helene	4,103	15	25.94 30.00 + .09	69.0 + 2.5	94	33	82	46	1	55	35	39	40	0.32	- 0.6	5	3,498	sw.	36	w.	25	13 12 4 3.1 70.6 1890	65.1 1884
Rapid City	3,280	9	26.69 29.93 + .02	73.4 + 2.7	100	10	86	52	1	52	40	45	45	1.31	- 0.8	5	6,155	s.	36	s.	25	13 12 7 2 2.8 74.5 1890	68.4 1891
Cheyenne	6,105	24	24.17 29.94 + .05	67.7 + 0.7	94	11	91	46	28	54	36	49	58	3.25	- 1.4	9	6,290	nw.	33	sw.	22	7 22 4 2.8 70.5 1876	69.2 1875
Lander	5,377	....	24.77 29.98 + .02	66.8 + 0.6	94	10	84	42	28	50	46	43	48	1.09	- 0.1	9	3,160	sw.	36	sw.	26	9 22 1 2.4 73.7 1890	64.9 1882
North Platte	2,841	20	27.15 29.99 + .05	74.0 + 0.0	103	26	88	51	20	61	42	57	60	2.39	- 0.4	10	6,427	se.	44	hw.	23	9 20 2 4.5 77.4 1890	69.7 1891
<i>Middle Slope.</i>																							
Colorado Springs	6,098	12	24.19 30.04 + .04	66.8 - 3.1	88	26	78	48	21	55	33	46	54	2.95	- 0.2	12	5,783	n.	40	nw.	29	8 18 5 5.3 73.2 1874	64.6 1875
Denver	5,287	23	24.91 30.00 + .13	71.6 - 1.2	96	10	85	53	7	58	30	40	47	2.11	+ 0.4	11	4,802	s.	36	sw.	26	9 19 3 4.5 75.3 1881	67.8 1875
Pikes Peak	18,111	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pueblo	4,734	7	25.39 29.99 + .01	73.0 - 0.9	97	27	87	54	7	60	40	47	48	1.70	- 0.3	9	5,314	nw.	38	s.	12	7 20 4 5.1 77.2 1886	72.4 1891
Concordia	1,410	10	28.55 30.01 + .06	77.1 - 0.1	104	26	90	55	21	64	44	58	58	1.22	- 2.2	6	4,836	s.	24	s.	25	10 9 2 2.5 83.0 1890	72.8 1891
Dodge City	2,523	20	27.44 29.97 + .04	78.5 - 0.0	106	25	92	53	21	65	40	53	51	2.03	- 1.0	6	8,192	se.	47	sw.	29	18 10 3 3.4 82.4 1890	73.8 1891
Wichita	1,366	7	28.60 29.99 + .01	78.2 - 1.3	104	24	91	56	9	63	39	59	58	1.72	- 1.3	5	4,949	s.	25	s.	28	18 7 5 3.4 82.4 1890	74.6 1891
Oklahoma City	1,239	....	28.75 30.02 + .02	79.4 - 0.1	104	3	92	58	10	67	37	52	60	1.08	....	4	5,113	se.	24	h.	20	26 4 1 1.8 80.0 1890	71.3 1891
<i>Southern Slope.</i>																							
Abilene	1,749	9	28.24 30.00 + .04	82.0 - 1.4	104	3	94	62	11	71	33	57	49	0.79	- 0.8	4	5,491	se.	30	hw.	6	17 9 5 3.3 86.3 1893	80.2 1889
Amarillo	3,691	....	26.35 29.98 + .01	73.8 - 0.1	98	3	87	60	11	67	30	47	43	1.82	0.6	6	10,855	s.	54	h.	30	14 13 4 4.0 80.0 1890	....
<i>Southern Plateau.</i>																							
El Paso	3,796	17	26.24 29.95 + .04	81.0 - 2.7	102	4	91	63	14	68	36	42	43	1.40	- 0.9	3	4,834	se.	40	ne.	7	16 14 1 3.2 85.5 1884	79.0 1880
Santa Fe	7,051	20	23.44 30.00 + .05	68.8 - 0.4	84	24	80	49	4	90	40	47	48	1.70	- 0.7	3	5,017	se.	41	sw.	28	11 10 4 4.5 70.6 1886	64.0 1875
Tucson	2,390	10	27.48 29.86 + .01	85.2 - 2.0	105	5	99	66	10	73	35	55	44	1.60	- 1.7	12	3,635	nw.	36	se.	27	13 12 1 4.5 86.2 1789	77.4 1878
Yuma	141	19	29.63 29.82 + .02	91.2 - 0.3	113	25	105	72	2	78	34	93	45	0.35	+ 0.2	1	5,295	sw.	30	se.	14	23 7 1 2.5 94.0 1877	89.1 1885
<i>Middle Plateau.</i>																							
Carson City	4,720	7	25.36 29.96 + .01	68.6 - 0.9	90	31	84	46	27	54	33	37	35	0.21	- 0.2	5	....	....	28	1 2 1.1 69.3 1889	66.5 1892		
Winnemucca	4,340	25	25.71 29.91 + .09	71.5 - 0.6	94	9	87	49	4	56	42	32	32	0.39	- 0.3	5	6,750	sw.	56	s.	10 18 9 4 3.2 73.1 1888	64.9 1881	
Salt Lake City	4,345	21	25.72 29.90 + .09	74.6 - 0.0	96	10	88	53	28	62	34	44	38	0.82	- 0.2	4	4,167	se.	33	w.	3 15 14 2 3.7 78.4 1889	73.3 1891	
<i>Northern Plateau.</i>																							
Baker City	3,430	6	26.51 29.95 + .05	67.7 - 1.0	104	23	82	38	27	52	38	44	49	1.28	- 0.3	4	3,678	nw.	21	hw.	14	20 6 5 2.6 71.5 1889	64.0 1893
Idaho Falls	4,742	5	25.32 29.95 - .01	68.2 - 0.6	96	10	86	35	25	51	45	40	45	0.07	- 0.7	3	5,121	nw.	30	sw.	7	11 16 4 4.7 68.2 1894	67.0 1892
Spokane	1,930	18	28.02 29.99 + .07	70.0 + 1.0	95	23	85	45	1	55	40	49	41	0.29	- 0.4	3	4,231	sw.	16	24	10 5 6 4.2 75.5 1886	65.6 1881	
Walla Walla	1,018	9	28.95 29.99 + .05	75.5 + 0.3	99	23	90	51	*	67	39	46	38	0.03	- 0.4	1	4,059	s.	34	w.	15	24 7 0 2.7 78.0 1889	71.8 1892
<i>N. Pac. Coast Reg.</i>																							
East Clallam	....	....	55.6 - 0.1	94	13	65	42	9	46	46	....	....	0.53	....	2	....	w.	....	....	22 2 7 ....	....	

Note.—The data at stations having no departures are not used in computing the district averages. Letters of the alphabet denote number of days missing from the record.

*Two or more directions, dates, or years. †Received too late to be considered in departures, etc. ‡Normals of temperature and precipitation and extremes of temperature combined with Fort Washakie records. ||All temperature and precipitation normals and extremes of temperature are obtained from Fort Buford records. §All data, except precipitation, for 29 days only.

TABLE II.—*Meteorological record of voluntary and other co-operating observers, July, 1894.*

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
California—Cont'd.	o	o	o		Ins.	o	o	o	Ins.
Emigrant Gap *8	82	52	67.5	0.00	Orangevale f	107	50	78.7	T.
Escondido	101	51	72.2	0.00	Orland *8	113	70	88.3	0.00
Esparto *8	109	59	84.5	0.00	Oroville a *8	104	66	84.4	0.00
Evergreen					Oroville b	102	66	72.2	0.00
Exeter *	104	61	76.9	0.04	Pajaro *8	94	41	63.3	0.00
Fall Brook *1	97	52	68.2	0.04	Palermo f	109	58	81.7	T.
Farnington *8	104	48	75.4	0.00	Palms Springs *8	118	90	104.9	0.00
Felton *	98	46	69.3	0.00	Pasadena	96	45	70.9	0.05
Fernando *8	100	59	72.3	0.00	Paso Robles a *8	105	52	76.3	0.00
Klorence *8	85	55	68.4	0.00	Paso Robles b	102	44	76.9	0.00
Florin *3	102	54	77.8	0.00	Petaluma *1	98	56	66.4	0.00
Folsom City a *8	110	68	80.5	0.01	Piedras Blancas LH				0.15
Folsom City b *1	106	65	80.4	0.01	Pigeon Point L.H.				0.00
Fremontville *1	90	53	65.7	0.12	Placerity a *8	100	53	74.5	T.
Fresno *8	111	65	86.9	0.00	Pleasanton a *8	104	57	70.8	T.
Fruto *8	105	70	80.5	0.00	Pleasanton b	99	44	68.8	0.00
Galt *8	106	65	80.4	0.00	Pt. And Nuevo L.H.				0.00
Georgetown†	94	50	74.0	T.	Point Arena L.H.				0.00
Gilroy *8	100	55	68.0	0.00	Point Bonita L.H.				0.00
Girard *	94	55	73.6	0.00	Pt. Conception L.H.				0.00
Glen Ellen *8	103	53	69.1	0.00	Point Fermin L.H.				0.00
Gormans Station					Pt. Hueneme L.H.				0.00
Goshen *8	109	60	89.0	0.00	Point Loma L.H.				0.00
Grass Valley a					Point Montara L.H.				0.00
Greenville *1	98	45	67.8	0.00	Point Reyes L.H.				0.13
Haywards *8	85	54	64.3	0.00	Point Sur L.H.				0.00
Healdsburg *1	94	46	66.1	0.00	Pomona *8	100	60	76.1	0.00
Hollister *8	90	51	67.3	0.00	Porterville *8	108	74	88.9	0.00
Hornbrook *8	99	62	70.5	0.00	Port Los Angeles *8	70	55	61.6	0.00
Humboldt L.H.					Puente *8	95	54	73.6	0.00
Huron *8	105	65	84.6	0.01	Ravenna *8	100	62	83.6	0.00
Hydesville†	74	45	58.2	0.00	Red Bluff *8	106	71	88.4	0.00
Independence†	102	56	79.1	0.12	Redding a *8	107	58	81.4	0.00
Indio a *8	117	80	95.8	T.	Redding b†	102	59	81.8	T.
Ione *8	105	60	77.1	0.00	Reedley (near) *1	104	78	88.3	T.
Iowa Hill *1	95	65	76.0	T.	Redlands b *8	104	66	80.1	0.00
Jackson.	94	50	72.8	T.	Repreasa	98	52	76.4	0.00
Jolon.					Rio Vista	104	52	75.0	0.03
Keeler *8	109	68	84.4	0.11	Riverside	105	46	75.2	0.00
Keene *8	97	60	77.9	0.00	Rocklin *8	104	65	83.2	0.00
Kennedy Gold Mine					Roe Island L.H.				0.00
Kernville	100	54	76.2	0.00	Rosewood *1	105	68	79.6	0.01
King City *8	100	50	69.9	0.00	Sacramento a	95	46	99.5	T.
Kingsburg *8	107	73	86.5	0.00	Sacramento b *8	96	58	71.1	0.00
Knights Landing *8	108	64	86.3	0.00	Sacramento c *8	98	62	78.2	0.00
Kono Tayee	96	57	76.4	0.00	Salinas *8	85	54	63.6	0.00
Lagrange *5	112	57	84.2	T.	Salton *8	119	82	100.1	0.23
La Porte *1	84	50	62.0	T.	San Ardo a *8	104	50	62.0	0.00
Lathrop *8	103	64	79.2	0.00	San Bernardino†	102	45	74.6	T.
Laurel *8	96	51	65.3	0.04	San Gabriel *8	98	58	72.7	0.00
Lemoore a *8	105	65	86.0	0.02	Sanger Junction *8	106	68	85.8	0.00
Lick Observatory†	86	59	71.3	0.00	San Jacinto	105	48	77.0	0.13
Lime Point L.H.					San Jose a *8	91	53	67.6	0.00
Livermore *8	97	52	89.5	0.00	San Jose b	92	41	64.4	T.
Livingston *8	112	68	85.5	T.	San Luis L.H.				0.00
Lodi	100	50	74.2	0.00	San Luis Obispado *8	85	41	64.9	0.00
Long Beach *8	85	55	62.5	0.00	San Mateo *8	89	56	67.4	0.00
Los Angeles *8	96	58	75.3	0.00	San Miguel *8	102	55	77.3	0.00
Los Banos *8	102	68	83.7	0.00	San Miguel Island	74	47	58.4	T.
Los Gatos a *8	102	55	74.6	0.00	San Pedro *8	83	61	70.2	0.00
Los Gatos b *8	95	44	65.0	T.	Santa Ana *8	93	60	75.4	0.00
Mammoth Tank *8	115	85	99.5	T.	Santa Barbara a	78	54	62.8	0.12
Manzana *1	105	60	77.1	0.00	Santa Barbara b *8	81	53	62.0	0.15
Mare Island L.H.					Santa Barbara L.H.				0.03
Mariposa *1	98	66	78.8	0.00	Santa Clara a *8	88	49	63.8	T.
Martinez *8	88	50	65.5	0.00	Santa Clara b	99	41	67.0	0.00
Marysville a *8	110	52	75.4	0.00	Santa Cruz a *8	81	54	62.9	0.00
Mendota *8	108	69	84.5	0.00	Santa Cruz b†	89	46	63.8	0.01
Menlo Park *8	90	52	67.8	0.00	Santa Cruz L.H.				0.01
Meredoc *8	107	62	83.0	0.00	Santa Margarita *8	100	51	67.8	0.00
Middletown *1	104	55	75.2	0.00	Santa Maria	80	48	63.4	0.06
Mills College					Santa Monica *8	74	53	66.2	0.00
Milton * (near) *1	106	61	82.4	T.	Santa Paula a *8	80	56	64.6	0.10
Modesto *8	104	60	76.9	T.	Santa Paula b	86	44	62.2	0.12
Mohave *8	108	75	84.0	0.00	Santa Rosa a *8	95	52	68.3	0.00
Mokelumne Hill *8	60	78.0	80.0	0.00	Saticoy				0.00
Monson *8	104	75	86.9	0.00	Selina *8	105	70	83.7	0.00
Montague *8	92	68	81.0	0.00	Shasta Springs	94	44	67.1	0.01
Monterey *8	74	50	60.4	0.00	Shingle Springs *8	98	65	71.5	0.00
Monterey (Hotel del Monte) *8	76	50	63.9	....	Sims *8	99	50	72.6	T.
Mount Glenwood *1	104	60	78.0	0.00	Sisson *8	98	43	69.7	0.00
Napa a *8	101	48	67.9	0.00	Soledad *8	90	50	65.1	0.00
Napa b	92	54	65.6	T.	Sonoma a *4	94	47	61.4	0.00
National City f	90	51	67.9	0.00	S.E. Farnallion L.H.				0.00
Needles f†	113	73	94.2	0.09	South Vallejo *8	89	53	63.5	0.00
Neenach *1	104	65	81.2	0.00	Spadra *8	100	50	74.7	0.00
Nevada City f	90	47	69.0	0.00	Stanford Univer'y.	93	47	65.5	T.
New Almaden *8	96	56	68.8	0.00	Stockton a	99	51	73.0	0.00
Newark *8	90	58	68.8	0.00	Stockton b *8	98	64	77.6	0.00
Newcastle a *1	101	56	78.1	0.00	Suisun City *8	103	55	67.9	0.00
Newcastle b *8	98	64	81.9	0.00	Summerdale				0.00
Newhall *8	107	59	78.8	0.00	Summit *8	78	50	63.2	0.00
Newman *8	111	70	88.0	0.00	Sutter Creek *8	98	46	72.4	0.00
Neville *8	92	54	67.7	0.00	Tehachapi a *8	90	60	77.9	0.00
Norwalk *8	96	60	72.6	0.00	Tehachapi b	106	65	89.0	0.00
Oakdale a *1	105	58	79.6	0.00	Templeton *8	105	54	69.0	0.00
Oakdale b *8	108	62	80.2	0.00	Towles *8	90	56	74.0	0.00
Oakland a *8	83	51	50.0	0.00	Tracy *8	98	60	72.5	0.00
Ogilby *8	119	55	97.6	0.00	Traver *5	107	70	93.1	0.00
Oleta *1	95	56	71.7	T.	Trinidad L.H.				0.00
Ontario a *8	100	58	76.7	0.00	Tropic *8	90	54	66.5	0.00
Ontario b	102	52	75.2	0.00	Tulare a *8	107	63	85.2	0.00
					Tulare b				0.00

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
California—Cont'd.	0	0	0	Ins.	Colorado—Cont'd.	0	0	0	Ins.
Tulare c.	112	54	83.8	0.00	Watkins *1	96	50	76.8	0.80
Turlock a ^b	108	67	85.7	0.00	Yuma T.				
Turlock b ^c	109	48	77.6	T.	Connecticut.				
Ukiah f	99	43	71.2		Bridgeport *1	93	59	73.3	0.69
Upper Lake	101	53	75.0	0.00	Canton	97	45	72.6	1.92
Upper Mattole *1	95	50	68.0	0.00	Colchester	93	45	71.7	2.05
Vacaville a ^d	100	58	77.5	0.00	Falls Village				
Vacaville b ^e	110	60	76.3	0.00	Greenfield Hill				
Valley Springs *8	106	64	82.1	0.00	Hartford b.				
Ventura f	77	47	60.0	0.13	Hartford c.	95	52	74.0	0.00
Vina *8	104	61	87.5	0.00	Lake Konomoc				0.93
Volcano Springs *8	123	80	97.8	0.00	Lebanon				1.35
Walnut Creek	105	49	73.2	0.00	Meriden	97	58	73.0	
Wenrich Ranch					Middletown	100	48	74.3	1.10
Westley *8	104	65	82.6	0.00	New Hartford a ^f	92	49	69.5	3.71
Wheatland	108	53	78.2	T.	N. Grosvenor Dale	99	46	73.4	
Whittier *8	98	57	72.5	0.00	Norwalk	96	46	72.6	0.83
Williams *8	105	64	84.3	0.00	Southington *1	96	50	73.1	2.00
Willows a ^f	103	54	82.8	T.	South Manchester				1.70
Willows b ^f	103	65	84.7	0.00	Storrs	95	48	71.9	2.09
Wilmington *5	98	60	72.6	0.00	Thompson *1	93	50	70.0	
Winchester	112	44	77.6	0.06	Voluntown f	94	45	72.4	1.83
Winters *8	106	67	84.3	0.00	Wallingford f				1.16
Wire Bridge *5	100	61	79.6	0.00	Waterbury	94	48	72.9	2.43
Woodland *5	100	60	77.2	0.00	West Simsbury				1.95
Yerba Buena L. H.					Dover	95	56	77.0	2.16
Yreka f	99	42	70.8	0.77	Kirkwood				
Yuba City *6	105	64	84.2	T.	Milford	95	54	77.4	2.85
Colorado					Newark	96	50	76.0	2.44
Abbott					Wilmington f	101	55	80.0	0.94
Akron f	101	52	75.8	1.75	District of Columbia.				
Alma f	75	30	50.6	3.09	Disting Reserv'r *8	93	59	78.2	2.24
Amherst f					Rec'g Reserv'r *8	94	61	78.2	2.24
Avoca					West Washington	100	54	78.0	2.20
Boulder					Florida.				
Box Elder	89	48	69.0	3.08	Amelia f	90	71	No. 0	6.55
Breckenridge f	82	30	50.9	3.22	Archer f	95	68	80.3	12.21
Byers *1	95	46	69.8		Avon Park f	95	69	81.5	10.08
Canyon f	95	52	71.4	2.82	Brooksville f	90	70	79.0	11.08
Castle Rock f	97	44	68.6	2.46	Clermont f	94	71	81.7	7.00
Cheyenne Wells f	108	45	77.0	3.46	Eustis f	95	69	82.0	5.46
Climax *1	70	28	44.8	3.12	Federal Point f	93	68	79.2	9.00
Collbran					Fort Meade f	91	69	79.4	5.00
Como (near) f	77	37	54.8	5.83	Gainesville f	95	70	81.3	10.70
Cope f	105	47	75.1	0.76	Gasmere f	91	70	80.0	11.55
Deer Trail *5	97	60	74.7	2.55	Green Cove Spgs f	91	69	79.0	14.46
Delta f	108	46	75.8	0.58	Homeland f	92	68	79.5	9.47
Divide Ex. Station	86	43	63.1	2.82	Hypoluxo *1	89	74	81.1	5.34
Downing f	96	50	71.4	1.66	Kissimmee f	95	70	82.6	7.15
Dumont	93	42	63.4	2.99	Lake City f	91	72	79.5	9.43
East Dale					Manatee f	92	66	78.8	9.54
First View *6	100	56	75.6	1.45	Merritt Island f	92	72	81.5	5.94
Fleming					Moseley Hall f	91	70	79.4	15.29
Garnett					Mullet Key f	94	72	83.7	5.91
Glen Eyrie f	85	48	65.2	1.22	New Smyrna f	93	64	79.2	7.03
Glenwood Spgs f	94	50	70.1	3.25	Oak Hill f	92	75	82.0	5.15
Gold Hill *5	88	48	64.4	2.10	Ocala f	91	72	79.3	8.41
Grand Junction f	100	58	79.2	0.57	Orange Park	92	69	80.4	8.77
Greeley					Orlando f.	95	71	82.0	7.02
Gunnison f	86	35	62.6	0.21	Plant City f	95	69	80.7	6.55
Holly f					St. Francis B'sks	90	68	78.4	10.45
Hugo *5	100	67	79.7	3.00	Tallahassee f	91	69	77.8	12.60
Hugo (near) f	93	41	66.1	1.45	Tarpon Springs f	89	71	79.8	7.43
Husted f	95	45	67.4	2.21	Georgia.				
Julesburg	105	52	75.1	0.88	Adairsville f	97	67	77.4	3.18
Kirk					Alapaha f	94	65	79.7	6.59
Kit Carson					Albany f	97	66	81.0	7.24
La Jara f	89	45	66.0	1.30	Americus f	98	63	81.8	9.89
Lake Moraine	71	32	53.3	1.26	Athens f	91	58	76.5	0.04
Lamar	105	53	78.1	3.65	Bainbridge f	96	55	78.2	4.74
La Porte					Bainbridge b.	96	58	79.2	4.74
Las Animas f	101	48	74.8	0.10	Bainbridge b.	96	58	78.2	4.74
Lavender f	95	41	69.8	1.55	Bainbridge b.	96	58	78.2	4.74
Lay *1	100	52	69.6	0.90	Blakely *1	95	78	73.3	4.15
Le Roy *1	102	55	75.5	1.16	Bragt f	97	63	79.1	10.40
Leslie					Camak f	97	58	79.3	8.20
Loveland					Camilla	93	68	78.8	5.25
Minneapolis f	104	49	77.2	0.89	Canton f.				
Monte Vista	88	42	63.6	1.18	Clayton f.	87	51	71.6	7.29
Moraine f	83	38	59.6	2.25	Columbus f.	96	63	79.2	9.58
Pagoda (near) f	94	35	65.2	0.95	Cordele f	95	64	79.6	10.54
Paonia					Covington	98	58	78.2	9.58
Parachute f	96	50	74.0	0.91	El Dorado f.	95	42	77.2	0.85
Rangely	100	47	72.8	0.66	Elkhorn f.	97	55	76.1	3.15
Red Cliff					Jordans Grove f	97	55	76.1	0.85
Rico					Kankakee f.				
River Bend *6	102	70	81.2	6.50	Grinnellville f	97	60	78.6	0.78
Rocky Ford f	100	51	75.0	1.40	Halliday *2	97	55	75.4	1.60
Ruby f					Havana f.	99	55	77.0	1.04
Saguache f	88	40	64.3	1.13	Herrins Prairie *1	94	60	79.3	5.50
San Juan f					Mount Carmel f.	100	52	76.6	3.27
San Luis f	91	38	64.1	1.06	Mount Plaski f.	100	52	79.2	2.28
Seibert f.					Oliney a *1	99	55	77.2	3.13
Smoky Hill Mine f	86	42	62.2	3.46	Oliney b *1	107	60	77.7	3.13
Springfield f.					Oregon f.	106	42	77.2	0.85
Stamford *1	76	36	53.0	3.00	Owego *1	101	46	73.0	0.50
Steamboat Sprgs f	94	29	64.4	0.70	Ottawa f.	103	47	75.8	0.87
Sunny-side	76	36	54.8	3.71	Palestine f.	98	52	76.4	1.85
Thon f.	100	47	70.6	3.10	Paris f.	98	49	75.8	1.74
T. S. Ranch f.	92	50	72.0	1.20	Peoria f.				0.57
Twin Lakes					Philo f.	102	57	78.3	1.00
Vernon	105	52	76.2	1.87	Rantoul *f	100	56	77.2	0.41
Villas					Riley f.	99	48	74.2	0.31
Wallet f.					Rushville	102	53	78.2	0.67
Ward District					St. John *8	98	67	77.8	1.37
					St. John *8	98	62	75.4	4.42
					Gillsville *f	94	62	75.4	4.42
					Griffin f.	92	56	74.9	12.23
					Hawkinsville f.	93	60	75.6	14.84
					Hephzibah *f	88	60	75.3	7.69
					Lafayette f.	92	58	75.4	5.01
					Fort Gaines f.	96	61	82.8	5.29
					Gaineville f.	93	54	76.6	4.81
					Gillsville *f	94	62	75.4	4.42
					Elberton f.	97	59	74.6	1.16
					Fleming f.	100	51	81.4	11.66
					Forsyth *1	95	65	79.2	5.91
					Darien f.	96	60	80.0	9.87
					Diamondf.	96	67	79.0	7.66
					Dublin a f.	96	62	79.6	8.88
					Dublin b f.				10.13
					Eastman f.	94	62	80.0	10.75
					Elberton f.	97	59	78.0	12.23
					Fleming f.	100	51	81.4	11.66
					Forsyth *1	95	65	79.2	5.91
					Fort Gaines f.	96	61	82.8	5.29
					Gainesville f.	93	54	76.6	4.81
					Gillsville *f	94	62	75.4	4.42
					Griffin f.	92	56	74.9	12.23
					Hawkinsville f.	93	60	75.6	14.84
					Hephzibah *f	88	60	75.3	7.69
					Lafayette f.	92	58	75.4	5.01
					Fort Gaines f.	96	61	82.8	5.29
					Gainesville f.	93	54	76.6	4.81
					Gillsville *f	94	62	75.4	4.42
					Griffin f.	92	56	74.9	12.23
					Hawkinsville f.	93	60	75.6	14.84
					Hephzibah *f	88	60	75.3	7.69
					Lafayette f.	92	58	75.4	5.01
					Fort Gaines f.	96	61	82.8	5.29
					Gainesville f.	93	54	76.6	4.81
					Gillsville *f	94	62	75.4	

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean	
Iowa—Cont'd.	°	°	°	Ins.
Ovid †	107	50	78.8	0.48
Panama †	105	48	76.4	1.31
Richland †	105	64	77.6	1.78
Rock Rapids	106	42	77.2	1.88
Rockwell City				0.11
Sac City †	106	58	77.0	2.76
Seymour †	103	53	78.4	0.45
Sibley	102	43	72.6	1.01
Spirit Lake †	109	43	78.5	0.07
Sutherland	106	45	74.9	0.29
Toledo †	106	45	78.3	0.05
Vinton †	104	53	76.3	0.30
Washington †	104	48	76.9	1.14
Webster City †	108	51	77.7	T.
West Bend †	105	50	75.7	0.65
Williams †	107	41	75.0	0.14
Winterset †	105	51	78.2	0.50
Kansas.				
Abilene †	104	54	78.0	T.
Achilles †	110	62	76.3	2.45
Allison †	106	56	77.8	0.91
Altoona †	100	65	77.2	1.09
Atchison †	102	56	76.6	2.90
Beloit †	107	53	78.6	0.82
Burlington †	103	53	76.8	0.15
Coffeyville †	105	59	77.8	1.79
Colby †	107	45	76.6	1.76
Coldwater †	107	56	78.6	5.08
Columbus †	101	52	76.1	3.40
Coolidge †	108	49	77.4	2.14
Cunningham †	107	53	78.9	2.43
Downs				1.02
Eldorado †	109 ^d			1.71
Elk City †	115	56	79.5	1.51
Emporia †	101	58	78.4	0.20
Englewood †	108	50	79.6	0.66
Eureka Ranch †	111	47	78.8	2.39
Fort Riley †	100	45	70.2	1.30
Garden City †	104	52	76.6	2.20
Garfield				1.94
Gibson †	110	44	76.6	1.25
Gove †	108	60	78.8	1.15
Grenola †	110	53	79.7	1.20
Grinnell				1.75
Halstead *	102	50	74.6	0.71
Hays City †	108	49	78.4	0.65
Horton †	101	57	76.8	1.51
Hutchinson †	103	56	75.8	4.34
Independence †	109	54	80.9	2.36
Ionia †	107	49	76.7	0.70
Jaukt	108	50	75.9	0.62
Johnson †	105	51	77.7	2.72
Kiowa †	114	53	80.0	1.66
Lakin †	106	51	77.6	3.97
Lawrence †	98	57	77.9	1.86
Independence †	109	54	80.9	2.36
Ionia †	107	49	76.7	0.70
Jaukt	108	50	75.9	0.62
Johnson †	105	51	77.7	2.72
Kiowa †	114	53	80.0	1.66
Lakin †	106	51	77.6	3.97
Lawrence †	98	57	77.9	1.86
Lebo †	103	48	77.4	0.19
Leoti †	107	45	77.2	0.36
Liberat	109	50	80.8	0.42
Macksville †	112	52	79.7	0.85
McPherson †	101	55	77.9	2.80
Manhattan †	110	56	71.4	2.10
Marion †	103	48	75.5	0.93
Marmaton				0.75
Medicine Lodge				2.30
Minneapolis †	108	53	79.4	0.51
Moreland †	107	42	76.2	1.12
Morton †	107	50	77.6	4.95
Moun Hope †	104	66	78.4	1.18
Ness City †	106	53	81.8	0.47
New Eng. Ranch †	106	50	76.8	1.18
Oberlin †				1.12
Olathe †	102	52	76.1	4.93
Oswego †	109	46	77.0	2.10
Philippsburg †	107	50	78.4	1.37
Pleasant Dale †	105	50	76.0	0.34
Rome †	108	56	79.3	0.77
Salina †	104	55	81.2	0.33
Sedan †	106	58	80.8	1.26
Topeka	99	54	78.0	2.19
Tribune †	106	48	76.8	1.17
Ulysses †	116	48	81.2	1.73
Wakefield †	112	64	80.7	0.42
Wallace †				0.79
Wamego †	105	55	78.3	2.23
Washington †	105	51	76.7	1.43
Wellington †	102	66	81.7	2.69
Winfield †	114	52	81.9	1.58
Yates Center †	100	51	76.2	0.43
Kentucky.				
Alpha †	96	57	78.9	4.85
Blandville	97	58	76.0	2.82
Bowling Green a*	95	52	72.6	4.05
Bowling Green b†	97	57	76.8	3.84
Caddo †	98	59	80.5	0.60
Canton †	96	64	75.4	1.44
Carrollton †	100	46	77.6	1.55
Cattlettsburg †				3.42
Cromwell †				1.01
Earlington	96	56	76.6	2.40
Eddyville †	98	63	74.5	2.98
Edmonton †	93	51	73.8	2.54
Elizabethtown	96	52	76.4	1.85
Eubank †	95	48	74.2	1.44
Falmouth †				0.74
Fords Ferry †	100	54	78.4	0.86

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean	
Kentucky—Cont'd.	°	°	°	Ins.
Franklin †	101	65	77.1	3.90
Georgetown	97	62	76.8	1.26
Greendale †	92	60	73.9	2.97
Greensburg †	92	60	75.6	4.18
Harrordsburg †	96	46	75.9	1.48
Henderson †	94	60	78.4	1.41
Herbert	98	53	77.5	0.99
Louisville †	94	49	75.0	0.17
Marrowbone †	95	51	74.4	5.38
Matlock †	92	64	76.1	2.00
Mount Sterling †	94	48	75.7	2.36
Munfordville †	91	55	77.1	1.37
Paducah a†				1.48
Paducah b†	100	61	79.2	1.53
Russellville †	101	58	77.4	3.28
Sandy Hook †	95	43	74.0	1.51
Shelby City †	94	53	72.5	0.75
Shelbyville †	101	48	77.1	1.04
Springfield †	94	50	74.7	2.59
Williamsburg †				4.91
Louisiana.				
Abbeville	98	66	77.4	1.21
Alexandria	98	60	78.8	1.41
Amitie †	100	63	79.2	7.11
Bastrop †	100	61	77.7	5.30
Baton Rouge †	100	64	76.3	8.75
Calhoun †	102	64	79.0	6.60
Cameron †	103	67	82.7	5.13
Cheneyville †	101	59	79.0	6.92
Clinton †	101	58	76.8	3.58
Coushatta a†	101	60	79.2	3.73
Coushatta b†				3.73
Covington †	101	61	77.8	7.54
Davis	100	56	76.8	4.99
Delhi †				4.21
Donaldsonville †	100	65	80.2	5.98
Emilie †	99	66	78.5	8.50
Fairfield	100	62	78.6	6.50
Franklin †	103	63	79.2	8.56
Girard †	107	55	76.4	4.77
Grand Coteau	97	66	78.0	6.54
Hammond †	100	63	79.2	10.46
Houma †	97	60	80.5	7.59
Jeanerette †	100	62	78.4	7.79
Lafayette	104	63	79.7	7.13
Lake Charles †	100 ^c	61 ^c	79.9 ^c	3.66
Lake Providence †	98	61	78.2	4.26
Lawrence †	98 ^b	62 ^b	81.0 ^b	6.05
Liberty Hill	105	59	80.2	4.41
Many	100	61	79.5	2.53
Maurepas	100	62	79.5	6.73
Melville †	93 ^a	61 ^a	78.0 ^a	4.41
Minden †	105	60	80.4	4.49
Monroe †	101	63	80.9	4.52
Natchitoches †	100	56	77.3	6.59
New Iberia	99	65	79.0	6.59
Oberlin †	96	61	76.7	4.54
Opoelousas †	103	58	79.2	7.67
Oxford †	95	57	76.8	1.13
Paincourtville	99	57	79.3	1.21
Plain Dealing	100	59	77.9	5.02
Plaquemine	100	62	76.4	10.17
Rayne †	103	65	81.0	8.50
Roseland	99	62	78.8	8.46
Schriever †	100	67	78.9	9.11
Shell Beach	97	65	79.2	1.13
Sugar Ex. Station	99	66	79.8	12.71
Sugartown †	99	55	75.4	7.04
Thibodaux				7.04
Wallace	97	66	78.6	6.62
West End				4.44
Maine.				
Bar Harbor	92 ^a	48 ^a	68.7 ^a	1.99
Belfast	97	56	67.7	4.46
Calais †	91	47	68.4	2.24
Cornish †	96	55	70.5	4.70
Easton	93	45	67.7	2.48
Fairfield	93	45	69.5	2.56
Farmington †	100	49	69.4	1.92
Gardiner	99	49	72.1	2.30
Houlton †	94	47	69.1	3.75
Lewiston	100	53	72.0	1.46
Madison †	100	54	74.1	2.65
Mayfield	96	45	67.7	2.65
North Bridgton	96	51	70.4	2.90
Orono †	94	44	67.2	2.41
Petit Menan †	75	50	59.8	.....
West Jonesport ^a	80	51	59.4	.....
Maryland.				
Baltimore Val. ^b	97	55	73.9	2.98
Benedict †	99	54	79.7	3.74
Bettcheriville ^c	100	54	73.1	4.10
Charlotte Hall	99	54	77.6	2.91
Cherryfield ^c	97	50	70.6	3.52
Chestertown	93	55	76.4	1.97
College Park	100	49	75.8	2.86
Cumberland a†	98	52	75.2	2.33
Cumberland b†	99	52	77.0	3.25
Darlington †	95	51	78.0	1.98
Denton	97	54	77.7	1.04
Easton †	95	53	77.3	5.18
Fallston ^c	95	54	74.4	1.95
Fenby ^c	96	58	75.7	4.00
Frederick	98	50	75.9	2.10

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean	
Maryland—Cont'd.	°	°	°	Ins.
Great Falls ^a	95	60	77.6	2.11
La Plata †	99	58	82.6	0.56
McDonogh	92	51	75.6	7.13
Mardela Springs †	93	50	74.5	1.29
Mt. St. Marys Col.	97	58	80.4	1.29
New Market †	97	52	74.3	

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean	
Minnesota—Cont'd.	0	0	0	Ins.
Mazeppa ¹	105 ⁸	42	73.0	0.50
Medford ¹	105	52	72.6	0.07
Milan [†]	106	42	75.0	0.28
Minneapolis ^{a†}	105	50	76.5	0.27
Minneapolis ^{b†}	100 ⁸	48	76.5	0.19
Minnesota City [†]	103	42	72.4	0.37
Montevideo [†]	104	45	74.2	0.23
Morris [†]	100	48	74.1	1.18
New Richland ^{*1}	102	58	74.8	—
New Ulm [†]	106	60	79.8	2.63
Ortonville [†]	—	—	—	0.34
Park Rapids [†]	98	45	71.2	0.34
Perham [†]	96	—	—	—
Pine River ^{*1}	94	53	71.0	0.28
Pokemana Falls ¹	98 ⁸	42	70.2	0.36
Red Lake [†]	97	50	71.2	1.37
Red Wing [†]	—	—	—	0.10
Redwood Falls [†]	—	—	—	1.11
Rolling Green [†]	99	48	74.2	0.40
Rush City [†]	100	46	71.6	0.82
St. Charles [†]	104	42	73.4	0.17
St. Cloud [†]	96	55	74.4	0.51
St. Olaf [†]	100	50	72.4	0.77
St. Peter [†]	101	48	74.8	0.74
Sandy Lake Dam ^{*1}	96	54	69.8	0.04
Sauk Center [†]	99	42	71.2	0.04
Sunrise City ^{*6}	102	42	74.8	—
Two Harbors [†]	95	48	65.8	1.20
Wabasha ^{*1}	108	53	76.2	0.18
Willmar [†]	99	48	73.3	0.66
Winona [†]	103	57	79.0	1.27
Mississippi	—	—	—	—
Aberdeen [†]	103	58	80.0	3.55
Agricultural Col'ge	98	61	78.3	4.88
Batesville [†]	100	58	77.2	6.11
Bay St. Louis [†]	100	68	78.5	8.98
Biloxi [†]	98	68	79.7	7.28
Briers [†]	96	64	78.4	7.52
Brookhaven [†]	102	59	79.8	6.13
Canton [†]	97	64	78.7	6.33
Clarksville [†]	99	53	79.4	3.74
Columbus ^{b†}	106	60	81.2	5.93
Corinth [†]	100	59	76.8	4.79
Crystal Springs [†]	99	61	78.6	7.08
Duck Hill [†]	93	62	78.8	3.20
Edwards [†]	100	64	80.8	5.58
Egypt ^{*1}	100	65	77.8	—
Enterprise [†]	99	66	78.1	6.96
Fayette [†]	96	62	78.2	7.47
French Camp [†]	94 ⁸	55 ⁸	71.1 ⁸	6.28
Greenville ^a	99	62	79.5	5.15
Greenville ^{b†}	103	59	80.4	5.09
Hattiesburg [†]	100	63	80.6	7.48
Hazlehurst [†]	102	62	79.2	6.17
Hernando [†]	98	60	78.0	3.12
Holly Springs [†]	98	60	77.5	6.18
Ita Bena ^{*1†}	102	62	80.5	6.21
Jackson [†]	101	63	80.4	7.19
Kosciusko [†]	96	60	77.0	7.87
Lake [†]	98	61	77.8	5.77
Leakesville [†]	99	64	79.7	7.00
Logtown [†]	100	63	77.8	8.97
Louisville [†]	97	59	76.6	5.01
Macon [†]	102	60	80.2	5.03
Mayserville [†]	102	57	78.6	7.07
Moss Point [†]	99	67	81.2	5.75
Natchez [†]	98	61	79.4	3.12
Okolona [†]	101	59	80.6	1.84
Palo Alto [†]	99	62	79.1	4.60
Pontotoc [†]	97	55	77.4	6.05
Port Gibson [†]	99	60	79.6	5.80
Thornton ^{*1†}	98	66	80.4	3.49
Tipton ^{*3}	96	66	77.6	4.90
University [†]	95	56	77.4	6.41
Vaident [†]	107	57	80.7	5.48
Water Valley ^{*1}	101	57	76.4	2.27
Waynesboro ^{a†}	100	61	78.2	7.20
Waynesboro ^{b†}	100	60	78.9	7.04
Woodville [†]	100	62	80.2	6.90
Yazoo City [†]	107	61	81.4	3.93
Missouri	—	—	—	—
Appleton City [†]	99	57	77.0	8.15
Arthur ^{*3}	50	66.1	3.30	—
Bagnell [†]	—	—	2.09	—
Bethany [†]	104	51	77.1	0.37
Big Piney [†]	—	—	0.95	—
Birch Tree [†]	95	52	74.8	2.44
Bluffton ^{*1}	102	60	79.3	0.61
Boonville [†]	—	—	1.72	—
Brunswick [†]	97	57	77.2	0.52
Carrollton [†]	97	57	77.0	1.83
Carthage [†]	—	—	3.99	—
Conception [†]	88	59	70.9	2.75
Cowgill [†]	—	—	3.84	—
Darkeville [†]	103	56	78.6	0.35
Dixon [†]	100	63	79.2	1.72
Downing [†]	—	—	2.85	—
East Lynn ^{*1}	56	70.8	5.71	—
Edge Hill ^{*5}	94	60	75.4	2.61
Eight Mile ^{*1}	97	60	74.2	4.46
Eldon ^{*1}	100	58	75.1	1.62
Elmira [†]	105	46	76.8	1.28
Emma ^{*3}	104	66	78.2	3.10
Fairport [†]	—	—	1.67	—
Farmersville [†]	—	—	0.31	—

Monthly Weather Review.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean			Max.	Min.	Mean	
Missouri—Cont'd.	0	0	0	Ins.	Fayette [†]	108	52	81.0 ⁸	0.93 ⁸	Ashton [†]	110	48	75.0	2.83
Fox Creek ^{#1}	98	57	76.4	6.01	Bassett [†]	108	52	75.0	1.73	Beatrice [†]	105	52	77.0	1.39
Gallatin ^{*1}	102	58	76.9	1.33	Beaver City [†]	110	48	77.6	1.92	Bratton [†]	103	58	78.3	1.06
Gayoso ^{*3}	90	50	73.2	4.38	Burwell [†]	106	43	74.9	1.64	Callaway [†]	106	43	74.9	2.38
Glasgow [†]	104	51	77.2	1.68	Cornelia [†]	108	51	76.0	1.59	Creighton [†]	114	44	76.0	1.59
Glensted [†]	—	—	3.03	—	Creté [†]	105	53	76.6	0.61	Culbertson [†]	105	53	76.6	1.75
Gordonville ^{*1}	58	51	71.6	3.07	Curtis [†]	107	51	76.7	0.43	David City ^{*1}	106	51	75.0	1.00
Hastain [†]	100	50	76.4	2.91	Davidson [†]	110	60	80.5	2.34	Ericson [†]	104	48	71.9	3.68
Hermann [†]	—	—	0.57	—	Ewing [†]	105	51	74.9	1.78	Fairbury ^{*5}	105	51	74.9	2.26
Houstonia (near) [†]	97	43	72.1	1.49	Fairbury ^{*5}	105	62	78.2	2.81	Fort Robinson [†]	99	43	71.8	2.96
Ironton [†]	95	55	72.8	3.80	Franklin [†]	110	43	77.1	0.11	Franklin [†]	105	49	76.7	1.11
Kidder [†]	102	54	77.2	1.79	Geneva [†]	106	49	76.7	0.43	Geneva [†]	109	55	77.8	1.00
Lamar [†]	95	50	75.5	3.28	Genoa [†]	109	55	72.4	2.67	Gering [†]	105	56	79.7	1.82
Lamotte [†]	—	—	0.26	—	Glenwood [†]	108	56	79.7	1.83	Glenwood [†]	108	56	79.7	2.56
Landgon [†]	103	51	75.7	0.25	Hartington [†]	108	50	77.9	0.58	Hartington [†]	115	50	78.0	1.57
La Plata ^{*1}	98	60	77.5	2.32	Harvard [†]	115	50	78.0	0.68	Hebron [†]	105	51	75.8	1.24
Lebanon [†]	96	55	75.8	1.67	Hebron [†]	105	51	75.8	1.75	Imperial ^{*1}	106	59	79.2	1.00
Liberty [†]	100	58	77.8	3.11	Indiana ^a	110	59	79.8	0.92	Indiana ^a	108	57	79.8	1.36
Louisiana Bridge [†]	—	—	0.82	—	Keeny [†]	109	57	75.0	0.81	Keeny [†]	105	55	75.0	1.25
McCune ^{*1}	103	47	76.8	1.76	Leavenworth [†]	105	52	74.4	2.55	Leavenworth [†]	108	52	74.4	1.09
Marceline [†]	—	—	0.85	—	Leavenworth [†]	105	52	74.4	1.09	Leavenworth [†]	108	52	74.4	1.09
Marshall [†]	102	51	70.4	1.58	Leonard [†]	103	57	73.5	1.30	Leonard [†]	104	57	73.5	1.30
Maryville ^{*1†}	100	60	76.2	1.10	Lewiston [†]	104	45	72.7	0.94	Lewiston [†]	105	45	72.7	2.31
Mexico [†]	—	—	0.47	—	Lynch [†]	101	52	78.7	2.09	Lynch [†]	100	52	78.7	2.34
Miami [†]	—	—	2.60	—	Madrid ^{*1}	105	54	77.2	1.17	Madrid ^{*1}	105	54	77.2	2.34
Mine La Motte [†]	94	50	73.2	3.47	Marquette [†]	109	55	75.0	1.15	Marquette [†]	108	55	75.0	1.15
Neosho [†]	108	45	76.0	2.38	Minden [†]	102	50	78.3	1.00	Minden [†]	100	50	78.3	1.00
Nevada [†]	—	—	2.10	—	Mullen [†]	100	60	78.3	1.00	Mullen [†]	102	58	78.3	1.00
New Hartford ^{*1}	103	64	80.2	4.88	Nebraska City ^{*1}	100	55	74.3	0.59	Nebraska City ^{*1}	102	55	74.3	0.59
New Haven ^{*1}	104	64	79.6	1.39	Norfolk [†]	100	51	76.6	1.88	Norfolk [†]	102	51	76.6	1.88
New Madrid [†]	101	58	78.3	3.44	North Loup [†]	107	50	77.5	3.43	North Loup [†]	108	50	77.5	3.43
New Palestine [†]	—	—	3.83	—	Oakdale [†]	101	47	75.6	2.54	Oakdale [†]	102	47	75.6	2.54
Newport [†]	97	55	77.3	0.20	Ogallala [†]	109	50	78.0	0.81	Ogallala [†]	106	50	78.0	0.81
Oak Ridge ^{*4}	51	50	75.0	2.70	O'Neill [†]	106	51	77.2	0.79	O'Neill [†]	107	51	77.2	0.55
Oleland [†]	101	57	75.2	4.01	Ough [†]	—	—	—	—	Ough [†]	—	—	—	—

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
N. Mexico—Cont'd.	0	0	0	Ins.	N. Carolina—Cont'd.	0	0	0	Ins.
Las Cruces †	103	48	77.5	0.62	Goldsboro	96	60	76.8	7.20
Lordsburg ⁸	100	74	84.4	0.89	Greenville	98	60	79.0	5.07
Los Lunas	104	52	77.2	T.	Greensboro	97	60	78.6	5.07
Monero †	95	41	66.4	1.84	Henderson †	97	60	76.5	7.00
Olio †	102	45	77.7	0.22	Highlands	82	45	65.0	7.05
Bincon †	113 ¹	50 ¹	85.0 ¹	1.45	Horse Cove †	86	52	79.7	7.05
Roswell	101	53	75.5	0.45	Leinor † ¹	88	62	73.7	4.97
San Marcial †	98	54	76.4	0.26	Lilesville	.....	.....	.....	11.19
Socorro †	98	59	78.1	0.29	Littleton †	98	59	78.6	2.46
Springer †	99	54	77.2	0.17	Louisburg	96	56	78.2	6.12
Sulphur Hot Spgs †	85	39	61.4	1.57	Lumberton †	95	58	78.3	2.89
Taos †	101	42	71.1	1.17	Mocksville †	91	60	72.7	3.29
New York.	.....	.....	.....	.....	Moncure †	96	57 ^b	75.5 ^b	6.47
Addison	96	43	70.6	2.06	Morganston † ¹	94	50	74.0	3.08
Alfred Center	91	45	68.7	2.96	Mount Airy †	93 ^c	52 ^c	74.8 ^c	3.36
Angelica †	94	40	67.7	4.14	Mount Pleasant	94	56	76.8	3.05
Arcade	89	41	67.5	2.70	Murphy †	.....	.....	.....	5.07
Arkwright	86	46	68.8	.....	Newbern †	92	66	76.6	0.00
Atlants	.....	.....	2.95	.....	Oak Ridge †	95	59	76.8	6.64
Baldwinsville	94	53	73.0	2.97	Pantego	92	55	74.5	7.10
Bedford	97	44	73.5	1.32	Rockingham †	94	55	78.3	5.85
Big Sandy ¹⁰	95	60	71.6	.....	Raleigh †	98	56	78.3	7.70
Binghamton	97	45	71.1	2.88	Roxboro †	96 ^d	55 ^d	76.8 ^d	6.91
Bovina Center	.....	.....	5.25	.....	Saxontown	92	61	78.0	5.74
Brentwood	93	47	72.9	2.30	Selma	99	51	77.4	1.18
Brookfield	95	42	69.1	0.94	Shelby †	94	59	77.5	2.77
Canton †	96	48	69.4	2.92	Skyuka	84	52	68.8	2.77
Charlotte ¹⁰	88	53	68.3	.....	Sloan	94	58	77.8	8.43
Cherry Creek	.....	.....	1.71	.....	Soapstone Mt †	94	54	76.4	4.91
Cooperstown †	90	45	68.5	3.41	Southern Pines †	97	59	78.0	10.48
Cortland	87	49	68.7	2.53	Stem	97	67	81.0	4.47
De Bak Junction	.....	.....	3.41	.....	Taboro.	97	59	79.3	9.14
Demster	.....	.....	2.66	.....	Washington	95	67	79.6	11.61
Dunkirk	.....	.....	0.89	.....	Waynesville †	87	46	69.6	3.84
Eden Center	100	45	70.8	2.20	Weldon †	96	57	79.3	5.60
Ellis	.....	.....	2.98	.....	Willeyton	93	56	77.1	5.00
Elmira †	98	46	73.6	1.02	North Dakota.	.....	.....	.....	.....
Factoryville	102	41	72.4	2.19	Ashley	106 ^e	40 ^e	66.4 ^e	1.84
Fleming	94	50	71.7	2.82	Berlin †	103	43	70.1	0.20
Fort Niagara †	93	53	71.3	6.00	Bottineau	96	42	70.6	0.20
Friendship	99	40	67.4	3.99	Churchs Ferry	100	47	71.0	0.54
Glens Falls	95	48	71.1	1.71	Devils Lake	94 ^e	50 ^e	71.4 ^e	0.54
Gloversville	92	45	69.1	3.06	Fargo †	99	44	68.8	0.80
Hamilton	97	42	66.7	2.45	Forman †	104	43	72.6	0.59
Hess Road St'n †	92	46	69.1	3.81	Fort Berthold	101	41	73.8	0.52
Hightmount	91	41	68.2	.....	Fort Stevenson †	98	42	73.0	0.12
Honeymead Brook	95	44	72.0	2.56	Fort Yates †	104	49	75.0	0.38
Humphrey †	94	42	69.4	2.45	Gallatin †	104	40	70.8	0.70
Hyndsville	99	43	71.5	2.00	Grafton †	100	44	69.5	0.20
Ithaca	95	48	70.9	3.17	Jamestown †	106	44	73.3	1.95
Jamestown ¹⁰	92	47	71.0	.....	Jamestown †	98	50	73.3	1.84
King Station	.....	.....	3.63	.....	Kelso †	103	42	70.8	2.12
Lebanon Springs	94	42	70.0	3.40	Lemert	104 ^f	35 ^f	73.8 ^f	0.31
Le Roy	94	47	69.6	2.22	McKinney	100	42	72.8	0.31
Lockport	93	47	70.6	3.19	Minto †	103	41	72.1	0.67
Lowville	95	43	68.3	1.34	Montgomery	107	43	72.0	0.58
Madison Barracks †	94	54	72.1	2.02	Porta	107	43	72.0	0.58
Malone	92	49	67.5	4.87	Power †	107	45	75.2	0.58
Middletown	95	53	73.5	4.07	Power †	107	45	75.2	0.58
Minnewaska	99	47	70.8	3.11	Porta	107	45	75.2	0.58
Mount Morris	96	42	68.9	1.51	Porta	107	45	75.2	0.58
Newark Valley	.....	.....	3.01	Porta	107	45	75.2	0.58	
New Lisbon	92	41	67.2	2.13	Power †	107	45	75.2	0.58
North Hammond †	100	48	70.7	3.88	Power †	107	45	75.2	0.58
Number Four †	90	45	64.9	2.55	Power †	107	45	75.2	0.58
Ogdensburg	97	50	71.0	1.43	Power †	107	45	75.2	0.58
Oxford	95	43	70.3	2.73	Power †	107	45	75.2	0.58
Palermo †	96	48	70.3	1.85	Power †	107	45	75.2	0.58
Perry City	95	44	69.6	2.86	Power †	107	45	75.2	0.58
Pine City	.....	.....	1.72	.....	Power †	107	45	75.2	0.58
Plattsburgh B'ks	96	51	70.2	2.52	Power †	107	45	75.2	0.58
Port Jervis	94	47	72.7	1.83	Power †	107	45	75.2	0.58
Poughkeepsie	98	43	72.8	2.81	Power †	107	45	75.2	0.58
Rome	95	42	70.0	2.01	Akron	97	47	74.0	1.14
Romulus	98	50	73.0	2.90	Annapolis	100	41	73.3	0.54
Saranac Lake	91	43	66.3	3.44	Arcanum	.....	.....	.....	.....
Scottsville	.....	.....	3.35	.....	Ashland	94	48	72.8	1.00
Setauket †	95	52	74.5	0.63	Athens	97	48	74.4	1.38
South Canisteo	94	42	69.6	3.34	Atwater	.....	.....	.....	.....
South Kortright †	93	37	67.1	4.10	Bangorville	95	50	73.4	0.51
Stillwater	99	53	73.6	2.26	Batavia	.....	.....	.....	.....
Trumanburg	.....	.....	2.34	Belleville	98	51	76.8	0.80	
Varysburg	97	42	69.8	2.46	Benton Ridge	102	53	76.7	0.99
Wappingers Falls	98	48	75.2	1.46	Bethany	98	51	75.1	0.22
Warwick	.....	.....	1.39	Big Prairie	96	45	72.4	1.36	
Watertown	99	49	71.8	2.65	Benton Ridge	102	53	76.7	0.99
West Chazy	.....	.....	4.37	Benton Ridge	102	53	76.7	0.99	
West Point †	100	50	75.8	1.04	Bethany	98	51	75.1	0.22
Willets Point	97	54	75.3	4.66	Big Prairie	96	45	72.4	1.36
North Carolina.	.....	.....	.....	Bellefontaine	98	51	76.8	0.80	
Asheville	90	52	71.6	4.94	Benton Ridge	102	53	76.7	0.99
Auburn ¹	98	56	78.8	5.34	Benton Ridge	102	53	76.7	0.99
Bailey ¹	96	64	77.7 ^c	3.33	Bethany	98	51	75.1	0.22
Bakersville †	88	45	69.2	6.04	Bethany	98	51	75.1	0.22
Blowing Rock †	81	42	65.6	4.75	Big Prairie	96	45	72.4	2.07
Bryson City †	.....	.....	3.82	Camp Dennison	100	50	76.7	0.00	
Chapel Hill †	98	59	79.2	5.80	Canal Dover	100	42	73.2	1.28
Currituck Inlet †	.....	.....	6.02	Canton †	96	45	73.7	2.49	
Erie Mills	.....	.....	6.31	Cardington	95	41	71.7	3.49	
Experiment' Farm	95	54	78.2	5.69	Carrollton	102	40	73.3	1.20
Fair Bluff †	.....	.....	8.80	Cedarville	.....	.....	.....	.....
Falkland ¹	97	64	79.5	9.87	Celina	97	48	75.7	0.31
Fayetteville †	.....	.....	4.26	Cherry Fork	100	41	75.3	2.49	
Flat Rock	88	47	71.0	4.15	Circleville	96	46	74.5	0.59
Forest Hill ¹	86	59	69.3	4.20	Clarksville	96	46	74.5	0.59

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Ohio—Cont'd.	0	0	0	Ins.	Cleveland	93	48	73.1	2.32
Goldsboro	96	60	76.8	7.20	Clifton	102	39	72.8	2.61
Greenville	98	60	79.0	5.07	Coalton	97	40	74.1	1.80
Greensboro	98	60	78.6	5.07	Colebrook	102	39	74.1	1.63
Highlands	82	45	65.0	7.00	Cynthiana	96	45	74.7	1.44
Horse Cove †	86	52	79.7	7.05	Daytona	102	40	76.7	0.75
Leinor † ¹	98	62	73.7	4.97	Defiance	97	46	73.0	1.11
Lilesville	98	59	78.6	2.46	Denton	95	51	74.1	0.42
Littleton †	98	59	78.6	2.46	Dupont	97	43	72.6	0.72
Louisburg	96	56	78.2	6.12	Ellsworth	95	43	71.2	4.00
Lumberton †	95	58	78.3	2.89	Fairport Harbor ¹⁰	90	50	72.7	0.81
McKeesport	91	52	72.9	4.77	Fayetteville	95	47	75.3	0.81
Monroe	96	57	78.2	3					

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Pennsylvania—Con.	o	o	o	Ins.	S. Dakota—Cont'd.	o	o	o	Ins.
Greensburg †	.....	.....	3-81	Clark † ⁶	108	42*	77-5	0.43	Gainesville †
Greenville	97	39	70-2	Cross †	92	37	64-8	3-72	Golinda
Hamburg	101	49	76-0	De Smet †	107	44	77-6	0.08	Graham †
Hollidaysburg	.....	.....	2-03	Faulkton †	110	49	74-5	1.01	Grape Vine
Honesdale	93	48	71-7	Flandreau †	109	46	76-2	1.04	Hale Center †
Huntingdon †	103	39	73-2	Forestburg †	110	41	76-5	0.33	Hallettsville †
Johnstown †	98	44	71-5	Forest City †	108	53	81-0	0.02	Hartley †
Kane	92	38	68-0	For Meade	98	50	73-4	0.57	Haskell †
Kennett Square	96	48	74-8	Fort Sully	111	53	80-7	0.24	Hearne †
Kilmer †	104	51	78-0	Frankfort †	112	43	75-1	1.32	Hewitt
Lancaster	97	50	76-2	Gary	105	46	74-5	1.53	Highland
Lebanon	95	47	74-8	Greenwood	111	54	80-4	1.58	Houston †
Le Roy †	96	48	71-2	Highmore †	108	50	78-2	0.41	Huntsville T
Lewisburg	100	42	74-4	Hitchcock	.....	.....	0.25	Jefferson †	
Lock Haven †	102	31	69-4	Hotch City †	.....	47	.....	0.49	Kent
Lock No. 4 †	.....	.....	2-52	Howard †	106	48	74-7	0.88	Lampasas ¹
Lycippos	95	49	73-9	Kimball †	110	52*	78-4	0.42	Llano ¹ ³
Mahoning †	.....	.....	1-60	Millbank †	107	49	74-2	T.	Longview †
Oil City †	.....	.....	1-95	Oelrichs †	106	43	73-4	2.99	Luling †
Parker †	.....	.....	3-30	Orway	108	45	75-6	0.20	Marshall †
Philadelphia a	98	56	78-1	Parker †	108	45	75-6	0.20	Midland †
Philadelphia b	98	56	78-1	Parkston †	.....	.....	0.36	Mountain Spring †	
Phoenixville	95	50	75-5	Piedmont	.....	.....	1.06	New Braunfels †	
Pottstown	98	51	77-2	Plankinton †	112	44	77-3	1.33	Ochiltree †
Quakertown	98	45	73-3	Roseoud †	106	47	77-3	0.89	Orange †
Reading *	.....	.....	2-39	Shiloh †	113	48	78-1	2.84	Panter † ³
Ridgway †	.....	.....	1-68	Sioux Falls †	108	42	76-7	0.90	Paris †
Saegerstown	99	35	69-5	Tyndall †	108	51	78-2	1.07	Roby †
Salem Corners	95	47	73-0	Webster †	108	40	74-5	0.78	Rocky Point ¹
Saltsburg †	.....	.....	1-86	Wentworth †	107	39*	73-2	0.20	Rock Springs †
Selins Grove	98	54	76-4	Wessington †	111	49	77-3	0.12	Round Rock †
Shinglehouse	94	40	67-9	Wessington Spgs ¹	.....	.....	.....	San Antonio	
Smethport	95	38	68-0	.....	.....	.....	.....	San Marcos a	
Somerset	97	38	71-1	Andersonville ¹	94	53	74-6	0.05	San Marcos b
South Eaton	95	45	72-3	Arlington †	98	58	76-4	4.00	Sherman †
State College	96	45	72-0	Ashwood ¹ ¹¹	94	51	76-6	3.62	Sierra Blanca
Stoystown †	.....	.....	3-01	Bristol †	95	52	75-1	4.48	Silver Fulst.
Swarthmore	97	53	79-2	Brownsville †	99	50	73-3	3.63	Sugar Land †
Uniontown	94	44	71-8	Byrdstown †	98	59	78-8	2.75	Sulphur Springs
Warren †	.....	.....	2-58	Cartwright	90	48	72-2	5.70	Temple †
Wellsboro ¹ ¹¹	94	40	67-5	Clarksville	98	58	78-7	4.10	Tyler †
West Chester	94	53	75-5	Clinton †	.....	.....	4.45	Waco †	
West Newton †	.....	.....	3-86	Columbiat.	.....	47	73-4	0.27	Weatherford †
Wilkesbarre †	100	46	74-4	Covington ^a ^b	95	61	74-6	0.73	Wichita Falls †
York †	98	47	75-2	Covington ^b ^d	103	58	79-0	5.88	Utah.
<i>Rhode Island.</i>									
Bristol	.....	.....	2-22	Alpine City ¹	106	60	84-4	0.55	Aberdeen †
Kingston	93	49	72-1	Blue Creek ¹	.....	.....	0.20	Washington.	
Lonsdale	.....	.....	3-67	Brigham City	.....	.....	0.05	Anacortes.	
Pawtucket	95	51	73-4	Castle Gate †	98	51	72-6	0.57	Blaine †
Providence a	97	56	77-0	Cisco †	108	55	80-8	0.82	Blaine T.
Providence c	96	52	73-7	Coalville †	100	34	65-2	0.65	Bridgeport †
<i>South Carolina.</i>									
Allendale †	96	60	79-3	Jackson ^a ^b	89	51	71-1	4.55	Chalahs †
Anderson †	.....	.....	3-86	Jacksonville †	96	62	76-4	2.50	Colfax †
Batesburg †	94	55	76-6	Loudon †	.....	.....	0.27	Connelly.	
Blackville †	95	60	79-9	Lynville ¹	92	60	73-9	6.63	Connelly ¹
Blenheim ¹ ¹¹	92	59	75-8	Milan †	100	57	77-2	2.77	Costa Rica.
Branchville	96	60	82-9	Missionary Ridge ¹	94	73-4	.....	0.51	Crater Lake ¹
Camden †	.....	.....	3-97	Newport ¹ ³	93	55	75-0	0.55	Curry County ¹
Central ¹ ¹	78	60	68-3	Nunnelly ¹	94	63	75-6	0.46	Diamond Valley ¹
Cheraw a	97	58	78-4	Palmetto †	.....	.....	0.42	Doyle County ¹	
Cheraw b †	.....	.....	9-70	Parksville ¹	95	55	74-5	0.01	Elko County ¹
Conway	.....	.....	11-56	Ridderton †	94	55	76-1	0.01	Emery County ¹
Cross Hill ¹ ¹¹	93	64	78-3	Rockwood †	62	62	73-4	0.01	Garfield County ¹
Darlington ¹ ¹¹	90	60	75-8	Rogersville ¹	90	62	73-4	0.01	Gunnison County ¹
Edito	.....	.....	8-04	Rugby ¹	90	56	71-2	2.61	Hancock County ¹
Edgingham †	.....	.....	5-29	Savannah ¹	94	60	78-0	5.37	Harrison County ¹
Flint Hill †	94	57	77-4	Springdale ¹	94	56	74-7	3.70	Hinsdale County ¹
Florence †	96	60	80-2	Trenton	95	58	74-6	4.11	Hoback County ¹
Georgetown †	99	61	77-2	Waynesboro ¹	92	60	73-6	6.22	Hudson County ¹
Greenville	98	56	75-3	Texas.	.....	.....	0.20	Iowa.	
Greenwood †	100	58	79-5	.....	.....	.....	0.25	Jackson County ¹	
Harderville	93	64	77-9	.....	.....	.....	0.25	Jordan County ¹	
Hollands Store †	92	55	76-5	.....	.....	.....	0.25	Kane County ¹	
Kingtree d	92	62	78-2	.....	.....	.....	0.25	Kingsbury County ¹	
Kingtree j b	.....	.....	8-60	.....	.....	.....	0.25	Kirkland County ¹	
Little Mountain	96	59	78-0	.....	.....	.....	0.25	Kosciusko County ¹	
Longshore †	92	56	76-4	.....	.....	.....	0.25	Laramie County ¹	
McCormick ¹ ¹¹	94	64	73-9	.....	.....	.....	0.25	Laramie River County ¹	
Mount Carmel †	.....	.....	12-47	.....	.....	.....	0.25	Laramie Valley County ¹	
Pinopolis ¹ ¹¹	86	65	76-2	Boerne ¹ ³	105	66	78-9	0.13	Laramie Valley County ¹
Port Royal †	93	66	80-5	Brazoria †	100	68	80-3	4.16	Laramie Valley County ¹
St. Georges †	94	68	78-4	Brenham †	104	66	84-1	1.45	Laramie Valley County ¹
St. Matthews †	91	56	77-4	Burnet ¹ ¹¹	100	68	85-0	1.58	Laramie Valley County ¹
St. Stephens †	.....	.....	12-87	Camp Eagle Pass	110	70	87-4	0.15	Laramie Valley County ¹
Santuck ¹ ¹¹	90	62	76-2	Childress †	106	61	81-2	1.20	Laramie Valley County ¹
Shaws Fork ¹ ¹¹	98	62	78-2	Coldwater †	104 ^d	69-4	78-2	1.19	Laramie Valley County ¹
Simpsonville	98	64	81-5	Coleman [*]	99	66	81-0	1.44	Laramie Valley County ¹
Society Hill ¹	99	59	76-5	Columbia ¹	102	65	81-0	2.25	Laramie Valley County ¹
Spartanburg	98	69	79-4	Corsicana ^a ^b	112	58	82-8	3-12	Laramie Valley County ¹
Statesburg †	87	60	76-5	Corsicana b	104	60	81-0	1.59	Laramie Valley County ¹
Timmonsville c	94	68	80-8	Cuero †	106	67	85-0	2.47	Laramie Valley County ¹
Trenton	89	60	77-8	Dallas †	108	59	80-3	1.79	Laramie Valley County ¹
Trial †	93	60	77-8	Devine	101	61	82-2	0.86	Laramie Valley County ¹
Watts ¹ ⁵	93	59	77-9	Durham †	.....	.....	0.20	Laramie Valley County ¹	
Yorkville	93	60	77-4	Duval ¹	110	72	89-3	0.15	Laramie Valley County ¹
<i>South Dakota.</i>									
Aberdeen	103	48	75-4	Eastland ¹	107	68	81-1	0.20	Brattleboro.
Alexandria †	110	44	75-4	Estelle †	111	60	83-5	0.87	Burlington †
Armour †	110	45	75-4	Flower Bluff †	102	69	82-2	1.21	Cornwall.
Ashcroft †	103	39	69-5	Forrestburg †	106	60	84-4	1.53	Enosburg Falls †
Bowdrie †	.....	.....	1-13	Fort Brown †	102	63	82-6	3.39	Hartland †
Brookings †	104	39	71-1	Fort Clark	108	70	86-4	0.05	Hartland †
Castlewood †	106	37	73-4	Fort Hancock	109	41	78-9	1.81	Hartland †
<i>Virginia.</i>									
Fredericksburg †	103	60	77-4	Fort McIntosh	106	70	87-1	1.10	St. Johnsbury
Fort Ringgold †	105	67	84-8	Fort Ringgold †	105	67	84-8	4.00	Simonsville
Fredericksburg †	102 ^c	59	81-5	Fredericksburg †	102	60	84-4	1.76	Stratford †

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Texas—Cont'd.	o	o	o	Ins.	Texas—Cont'd.	o	o	o	Ins.
Gainesville †	108	63	81-4	4-25	Gainesville †	108	63	81-4	4-25
Gulindo	.....	.....	.....	.....	Graham †	107	52	82-4	1-20
Graham †	.....	.....	.....	.....	Grape Vine	110	50	82-0	2-08
Hale Center †	103	57	78-7	2-25	Hale Center †	103	57	78-7	2-25

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
<i>Wisconsin.</i>									
Amherst	o	o	o	Ins.	Prairie du Chien	o	o	o	Ins.
Antigo	99	41	73.6	1.45	Racine ^a	107	45	75.6	0.04
Baraboo	97	35	70.4	0.85	Reedsburg	100	43	73.2	0.50
Baron	98	34	70.6	2.40	Royerton	99	43	72.0	1.01
Bayfield	97 ^c	47 ^c	69.8 ^c	1.30	Sharon	97	40	73.4	0.80
Beaver Dam	98	58	77.4	0.72	Sheboygan	97	42	70.8	1.68
Belleville	94	40	71.2	1.77	Stevens Point	98	45	72.4	0.93
Beloit	100	46	74.8	1.23	Sturgeon Bay	92	48	68.2	.....
Black River Falls	103	35	73.0	2.00	Twin Rivers	94	45	69.2	.....
Cadiz ^a	96	46	69.2	2.11	Valley Junction	99	37	70.3	1.01
Centralia	99	43	73.0	1.39	Viroqua	102	48	73.8	0.89
Chilton	103	46	73.2	0.29	Watertown	98	43	72.2	0.94
Chippewa Falls	99	40	71.2	0.38	Westfield	97	49	73.8	1.16
City Point	97	34	68.7	0.36	Wesley	105	42	73.8	0.95
Columbus	99	37	72.2	1.10	Whitehall	102	40	77.0	T.
Crandon	99	41	71.8	1.64					
Delavan	100	40	72.8	1.13					
Depere	98	39	72.4	1.19					
Florence	97	37	67.2	1.95					
Fond du Lac	100	43	72.5	0.62					
Grantsburg	105	45	73.4	0.55					
Hartford	.....	.....	.....	2.01					
Harvey	99	44	72.5	0.61					
Hayward	96	38	70.2	0.56					
Hillsboro	100	37	72.1	0.92					
Janesville	100	47	74.1	2.00					
Juneau	101	44	73.6	0.66					
Kenosha ^a	96	60	77.5	.....				
Koepenick ^a	94	50	71.6	1.20					
Lancaster	102	47	72.5	1.					
Lincoln	.....	.....	79.8	1.03					
Madison	95	50	74.6	1.75					
Manitowoc	97	47	69.6	1.10					
Meadow Valley	97	41	70.0	1.38					
Medford	99	38	70.2	0.93					
Menomonie	103	35	72.0	0.42					
Neillsville	96	38	70.6	0.39					
Oconomowoc	100	45	74.0	0.96					
Oconto	97	44	69.9	1.95					
Oscella	104	40	72.4	0.44					
Pepin	101	45	76.0	0.10					
Portage	.....	.....	.....	1.05					
Port Washington	97	47	71.0	0.38					

Reports received too late to be used in general discussion of weather for July, 1894.

California.					Kansas—Cont'd.				
Campo Seco	.....	.....	0.00		Winona ^a	106	66	75.4	3.12
Fort Ross	.....	.....	0.00		Missouri.	.....	.....	.....	.....
Hueneme	.....	.....	T.		Lexington	98	54	75.5	1.93
Los Alamos	.....	.....	0.00		Mount Vernon	100	49	75.8	4.83
San Luis Obispo	.....	.....	0.05		New Jersey.	.....	.....	.....	.....
Colorado.	.....	.....	.....		Rancocas ^a	99	56	.....	3.30
Surface Creek	96	49	70.2	0.20	New York.	.....	.....	.....	.....
Illinois.	.....	.....	.....		Wedgewood	98	46	72.1	2.49
Aurora	102	48	75.1	0.62	South Dakota.	.....	.....	.....	.....
Kansas.	.....	.....	.....		Farmingdale	.....	.....	.....	.....
Collyer	100	63	77.6	0.35	Rochford	.....	.....	.....	.....
Grainfield	108	68	82.1	1.80	Silver City	.....	.....	.....	.....
Manhattan	109	52	79.2	2.27	Yankton	107	53	78.0	0.29
Monument	108	62	79.4	1.75	Texas.	.....	.....	.....	.....
Quinter	108	64	82.0	0.00	Brady	105	60	81.8	1.65
Sharon Springs	108	60	78.6	3.20	Happy	104	54	77.1	3.23
Wakeeney	106	68	79.8	0.60					

Received too late for publication in June, 1894.

California.					Iowa—Cont'd.				
Anderson	88	50	65.9	1.56	Sutherland	100	39	72.5	3.12
Barstow	99	46	70.6	T.	Upper Marlboro	101	45	73.2	1.39
C. Mendocino L. H.	.....	.....	1.61		University	98	44	76.0	1.62
Cloverdale	98	50	65.2	1.71	Missouri.	.....	.....	.....	.....
Germans Station	.....	.....	0.12		Lexington	94	46	74.4	5.74
Gridley	102	54	65.9	0.74	Liberty	96	45	77.0	5.92
Kernville	.....	.....	0.00		Elko (near)	88	34	57.2	1.49
Middletown	94	46	62.7	0.89	New Hampshire.	.....	.....	.....	.....
Neenah	91	46	65.2	0.00	Peterboro	91	34	65.1	2.90
Oroville	88	46	65.2	0.45	New Mexico.	.....	.....	.....	.....
Pilot Creek	.....	.....	3.00		Silver Bow	.....	.....	.....	.....
Point Sur	.....	.....	0.72		Nevada.	.....	.....	.....	.....
San Luis Obispo	.....	.....	0.21		Elko (near)	88	34	57.2	1.49
Sharon Springs	87	32	59.3	2.83	New Hampshire.	.....	.....	.....	.....
Summerdale	.....	.....	1.76		Peterboro	91	34	65.1	2.90
Sutter Creek	90	36	57.9	1.11	New Mexico.	.....	.....	.....	.....
Washington	.....	.....	2.15		Los Lunas	101	51	75.4	T.
Wenrich Ranch	.....	.....	T.		New York.	.....	.....	.....	.....
Illinois.	.....	.....	.....		Factoryville	94	35	68.4	1.92
Louisville	96	38	74.7	1.91	Romulus	92	38	68.4	2.93
Martinsville	97	35	73.5	1.10	Oregon.	.....	.....	.....	.....
Iowa.	.....	.....	.....		Forest Grove	87	42	58.2	1.97
Fayette	97	35	72.2	1.80	Jacksonville	82	39	56.7	3.15

Reports received too late, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Texas.	o	o	o	Ins.	Texas.	105	50°	77.4°	2.14
Corsicana ^a	.....	.....	.....		Happy	104	.....	.....	1.40

EXPLANATION OF SIGNS.

* Extremes of temperature from observed readings of dry thermometer.

† Weather Bureau instruments.

A numeral following the name of a station indicates the hours of observation from which the mean temperature was obtained, thus:

1 Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4.

2 Mean of 8 a. m. + 8 p. m. + 2.

3 Mean of 7 a. m. + 7 p. m. + 2.

4 Mean of 6 a. m. + 6 p. m. + 2.

5 Mean of 7 a. m. + 2 p. m. + 2.

6 Mean from readings at various hours reduced to true daily mean by special tables.

7 Mean from hourly readings of thermograph.

8 Mean of sunrise and noon.

9 Mean of sunrise, noon, sunset, and midnight.

The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.

An italic letter following the name of a station, as "Livingston *a*," "Livingston *b*," indicates that two or more observers, as the case may be, are reporting from the same station. A small Roman letter following the name of a station, or in figure columns, indicates the number of days missing from the record; for instance, "ii" denotes 14 days missing.

Note.—The following changes have been made in names of stations: Idaho, Eglin, changed to Parker.

TABLE III—Data from Canadian stations for the month of July, 1894.

Station.	Pressure.			Temperature.	Precipitation.	Prevailing direction of wind.
	Mean not reduced.	Departure from normal.	Total.			
St. Johns, N. F.	Inches.	Inches.	Inches.	o	o	w.
Sydney, N. S.	29.82	- .01	59.7	- 1.3	2.26	sw.
Grindstone, G. St. L.	29.87	- .05	61.2	- 2.0	2.40	sw.
Halifax, N. S.	29.84	+ .05	64.4	+ 1.9	1.05	s.
Grand Manan, N. B.	29.90	+ .05	63.1	- 1.2	1.21	sw.
Yarmouth, N. S.	29.90	+ .05	58.8	- 1.2	0.81	sw.
Saint Andrews, N. B.	29.87	- .02	62.8	- 1.0	1.07	nw.
Charlottetown, P. E. I.	29.88	- .02	66.3	- 1.7	2.20	w.
Chatham, N. B.	29.88	+ .02	66.4	- 3.4	1.31	w.
Father Point, Que.	29.84	+ .03	57.0	0.0	3.67	sw.
Quebec, Que.	29.59	+ .04	64.6	- 0.4	6.67	+ 2.71
Montreal, Que.	29.72	+ .04	67.6	- 0.9	2.82	sw.
Rockliffe, Ont.	29.42	+ .03	63.6	- 0.6	2.18	nw.
Kingston, Ont.	29.64	+ .05	68.2	- 0.2	3.09	0.17
Toronto, Ont.	29.60	+ .03	68.8	- 1.3	1.62	nw.
White River, Ont.	28.63	+ .03	62.8	- 2.1	2.00	1.31
Port Stanley, Ont.	29.38	+ .03	68.3	- 1.3	2.21	nw.
Saugeen, Ont.	29.28	+ .04	66.3	- 2.8	0.84	1.19
Parry Sound, Ont.	29.28	+ .03	66.8	- 1.8	2.35	sw.
Port Arthur, Ont.	29.24	+ .04	63.4	- 0.1	3.24	w.
Winnipeg, Man.	29.09	- .01	68.6	- 4.6	0.63	sw.
Minnedosa, Man.	28.12	+ .01	67.4	- 5.9	0.77	sw.
Qu'Appelle, Assinibois.	27.70	- .00	69.6	- 0.5	0.58	sw.
Medicine Hat, Assinibois.	27.66	+ .02				

TABLE IV a.—Hourly sunshine as deduced from sunshine recorders, July, 1894.

TABLE IV b.—*Hourly precipitation, July, 1894.*

TABLE V.—Mean temperature for each hour of seventy-fifth meridian time, July, 1894.

Stations.	1 a.m.	2 a.m.	3 a.m.	4 a.m.	5 a.m.	6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	Noon.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.	Midnight.	Mean.		
Abilene, Tex.	78.2	77.0	75.8	74.7	73.4	72.4	71.4	73.1	76.3	79.9	83.0	85.8	88.2	89.7	90.7	91.4	92.4	92.2	91.3	89.5	86.5	83.5	81.3	79.4	82.4	
Albany, N.Y.	68.4	67.4	66.8	66.2	66.6	68.2	70.9	73.5	76.0	79.8	80.6	81.1	81.6	80.6	79.2	77.3	75.1	72.8	71.4	69.9	69.1	69.1	73.8	73.8	73.8	
Alpena, Mich.	63.5	62.5	61.3	60.3	59.5	59.3	61.8	66.3	69.1	70.8	72.2	73.6	73.3	73.0	73.4	72.9	71.8	71.4	70.5	69.1	68.3	65.7	64.6	67.5	67.5	
Amarillo, Tex.	73.0	71.3	70.2	69.5	68.0	67.9	67.4	67.9	70.6	74.0	76.5	78.5	80.7	82.5	84.0	85.0	85.8	85.9	85.5	84.8	82.2	78.7	76.1	74.3	76.7	
Atlanta, Ga.	71.5	70.8	70.2	69.4	69.1	68.9	69.5	71.6	73.4	75.6	77.8	79.5	81.3	82.5	83.1	82.7	82.4	79.4	78.1	76.2	75.1	73.8	73.2	72.2	75.3	
Augusta, Ga.	72.6	72.3	71.7	71.2	70.7	71.1	72.5	74.6	76.7	78.5	79.9	81.8	82.8	83.3	83.1	83.2	82.5	81.1	79.3	77.8	76.2	75.2	74.1	73.5	76.9	76.9
Baker City, Oreg.	63.9	61.6	60.0	58.7	56.9	55.5	54.2	53.6	55.5	60.3	65.2	68.7	71.4	74.2	76.7	78.6	79.4	79.8	79.0	77.4	75.6	72.7	66.7	67.3	67.3	
Baltimore, Md.	72.8	72.2	71.0	70.4	69.9	67.1	71.8	75.2	77.3	79.6	81.5	82.7	83.6	84.4	85.6	85.1	83.3	81.8	80.1	78.0	76.8	75.8	74.6	73.4	77.3	77.3
Bismarck, N. Dak.	68.2	66.3	65.2	63.6	62.1	61.0	60.6	64.4	67.9	72.8	78.5	81.6	84.1	85.4	85.8	86.8	86.6	85.7	84.1	81.4	76.6	73.1	70.4	74.9	74.9	
Boston, Mass.	69.1	68.3	67.9	67.5	67.1	67.5	69.2	72.1	74.1	75.9	77.0	77.8	78.4	77.7	77.3	77.4	76.7	76.7	74.3	72.8	71.0	70.3	69.7	72.8	72.8	
Buffalo, N. Y.	68.4	68.0	67.7	67.3	66.6	67.1	68.2	70.1	71.7	73.0	73.5	74.1	74.6	75.2	75.3	75.4	75.2	74.4	72.3	71.6	69.6	68.9	71.1	71.4	71.4	
Charleston, S.C.	76.5	76.1	75.8	75.4	74.9	74.7	75.7	77.5	78.7	80.2	81.9	83.0	83.2	82.6	81.8	80.2	79.6	78.5	77.3	76.9	77.1	76.8	76.7	78.5	78.5	
Charlotte, N.C.	71.1	70.7	70.2	69.7	69.2	69.1	70.0	72.5	74.0	76.4	78.1	79.3	80.6	81.9	82.6	83.0	81.5	81.5	78.6	76.3	75.2	73.9	72.8	75.5	75.5	
Cheyenne, Wyo.	61.5	60.5	58.8	57.3	56.7	56.0	55.3	58.0	63.9	68.8	72.3	74.8	76.3	77.7	77.9	78.1	76.2	75.1	74.2	71.8	68.1	65.5	63.4	67.7	67.7	
Chicago, Ill.	70.5	70.1	69.2	68.6	67.9	67.9	70.9	72.6	74.3	74.7	75.0	74.0	75.6	76.1	76.9	77.2	77.1	77.0	75.9	74.5	73.6	72.7	72.0	73.1	73.1	
Cincinnati, Ohio	73.6	72.8	71.7	70.6	69.6	68.7	68.9	71.7	74.8	77.6	80.0	81.6	83.6	84.8	85.5	85.6	85.0	84.5	82.3	80.8	78.9	76.9	75.3	77.8	77.8	
Cleveland, Ohio	69.4	68.7	67.8	67.0	66.4	66.4	67.3	71.0	73.4	75.5	76.7	78.0	77.2	78.8	79.4	79.6	78.5	76.5	74.6	73.1	71.3	69.3	67.3	73.3	73.3	
Colorado Springs, Colo.	62.2	61.2	59.9	58.6	58.0	57.8	57.4	59.1	62.4	66.5	69.5	72.1	74.0	75.2	75.8	76.0	74.8	73.7	72.6	71.1	69.5	67.7	65.6	63.9	66.9	
Columbus, Ohio	71.4	69.8	69.0	68.8	66.9	66.7	68.1	70.8	74.6	78.0	80.5	82.3	83.8	84.6	85.0	85.3	84.3	82.6	79.9	77.8	75.7	74.1	72.4	76.5	76.5	
Denver, Colo.	68.5	66.7	65.5	64.5	63.1	62.3	61.1	64.5	68.5	72.9	75.8	81.8	82.3	83.0	84.0	84.8	82.3	80.8	80.4	77.2	77.2	75.8	73.7	71.5	69.5	
Des Moines, Iowa	75.0	73.6	72.3	71.2	70.2	68.8	68.1	69.4	73.4	77.2	80.6	83.2	84.9	87.0	87.5	87.6	87.0	85.5	83.4	81.1	78.7	76.5	75.9	75.9	79.0	
Detroit, Mich.	68.8	67.9	67.2	66.4	65.8	65.4	66.8	70.4	72.4	74.9	77.3	79.3	80.6	81.6	81.8	81.4	81.3	80.5	78.5	76.1	73.5	72.0	69.5	73.8	73.8	
Dodge City, Kans.	71.5	70.8	70.0	68.9	68.0	67.1	66.5	68.8	72.0	76.4	80.7	84.5	87.2	88.7	89.1	90.2	89.4	88.2	85.5	84.5	82.9	80.9	77.1	74.0	72.3	
Duluth, Minn.	64.5	64.1	63.7	63.0	62.5	61.8	62.3	64.1	66.1	67.9	70.0	71.8	73.7	74.6	74.6	74.6	74.6	72.2	70.2	68.8	66.9	65.5	68.6	70.3	70.3	
Eastport, Me.	54.9	54.8	54.5	54.1	53.7	53.0	53.7	58.7	61.0	63.0	64.3	65.4	66.1	65.5	65.0	64.9	63.6	61.5	59.8	57.0	55.8	55.7	55.4	55.4	55.4	
El Paso, Tex.	78.1	77.0	75.7	74.8	73.0	71.3	69.8	69.6	73.1	77.1	80.8	84.1	86.7	88.5	90.0	91.3	92.5	91.6	91.0	89.8	87.1	84.0	81.7	79.5	81.6	
Fort Smith, Ark.	76.8	75.3	73.8	72.4	71.0	70.5	77.4	80.8	83.6	85.7	87.9	90.2	90.5	91.2	90.6	90.6	88.1	84.5	84.5	82.3	80.3	78.6	78.1	78.1	78.1	
Galveston, Tex.	80.2	80.0	79.6	79.4	79.2	78.7	78.3	80.2	81.7	82.5	82.5	83.3	83.4	83.2	82.7	81.4	81.0	80.7	80.5	79.5	78.1	76.0	72.0	81.0	81.0	
Grand Haven, Mich.	67.2	66.4	65.6	65.1	64.5	64.3	65.9	67.9	70.5	72.1	72.6	73.5	73.9	74.0	74.7	74.5	74.7	72.7	72.2	70.0	69.3	68.2	70.3	70.3	70.3	
Havre, Mont.	65.6	63.7	61.4	59.3	55.4	53.9	57.5	62.9	67.5	70.7	72.7	74.7	77.0	79.2	79.3	79.4	81.9	84.8	84.0	84.0	81.8	77.2	71.6	68.2	71.6	
Helena, Mont.	65.9	64.2	62.4	61.3	59.8	56.6	57.5	61.4	63.7	66.4	69.3	72.3	75.1	76.5	77.9	79.0	79.0	78.7	78.2	76.8	74.0	70.5	67.7	68.9	68.9	
Huron, S.Dak.	68.5	66.2	64.5	63.0	61.5	60.1	60.1	65.3	70.5	75.9	80.4	83.6	85.9	87.8	89.1	89.5	89.2	88.4	87.1	82.5	78.1	74.5	71.5	70.3	70.3	
Indianapolis, Ind.	70.2	68.2	66.2	65.7	65.4	64.7	65.7	71.5	75.2	78.0	81.5	83.3	84.3	85.3	85.9	86.4	85.8	83.8	82.3	80.3	77.5	73.7	71.8	70.5	70.5	
Jacksonville, Fla.	76.1	75.8	75.5	74.9	74.8	74.6	76.5	78.5	80.4	82.1	82.7	84.1	84.3	84.7	85.2	85.1	84.1	82.1	80.0	78.9	78.3	77.1	76.7	76.4	79.0	
Kansas City, Mo.	74.3	73.2	72.4	71.5	70.7	70.1	69.8	70.7	73.1	75.5	77.8	80.0	81.5	82.9	83.7	84.3	84.8	84.5	83.4	81.8	80.5	78.7	75.5	77.4	77.4	
Key West, Fla.	80.3	79.9	79.6	79.5	79.3	79.3	81.1	83.0	84.1	84.8	85.3	85.5	85.1	85.6	85.4	84.6	84.5	83.7	82.7	82.0	81.6	80.9	80.7	82.5	82.5	
Knoxville, Tenn.	70.8	70.1	69.1	68.5	67.7	67.0	68.1	70.5	72.8	75.9	77.8	79.7	81.0	81.8	82.0	81.0	81.3	80.9	79.7	78.0	74.7	73.7	72.0	76.5	76.5	
Lander, Wyo.	62.5	60.9	59.7	57.9	55.7	53.9	52.9	55.8	63.6	72.1	72.1	72.1	74.3	77.5	77.5	78.0	81.7	81.7	81.2	79.9	78.6	76.6	74.8	68.8	68.8	
Little Rock, Ark.	73.4	73.3	71.9	71.2	70.5	69.8	70.0	71.9	74.6	76.1	81.0	83.3	85.0	85.5	85.8	85.7	85.7	84.3	83.2	81.3	78.5	75.5	74.2	77.9	77.9	
Louisville, Ky.	72.8	71.5	70.8	69.9	69.0	68.5	68.7	72.1	75.2	78.6	81.4	83.2	84.8	86.2	86.4	86.4	86.4	85.6	84.6	83.6	81.1	78.6	77.1	75.3	77.8	
Lynchburg, Va.	70.9	70.0	69.1	68.6	67.9	67.9	70.6	73.6	76.6	79.3	81.5	83.2	84.7	85.4	85.7	85.4	84.4	83.1	81.9	80.0	77.5	76.1	71.8	76.5	76.5	
Marquette, Mich.	64.4	63.6	62.2	61.7	60.2	60.2	63.4	65.9	67.3	68.2	70.9	73.0	74.1	75.0	76.0	76.0	76.0	75.2	74.7	73.5	72.2	70.5	66.9	64.5	64.5	
Memphis, Tenn.	73.4	72.5	71.4	70.8	70.5	70.0	71.0	73.3	75.7	78.2	80.3	82.3	84.1	84.7	84.8	84.6	84.6	83.4	82.8	81.7	80.8	79.6	77.0	74.7	77.6	
Milwaukee, Wis.	68.8	68.0	67.1	66.5	65.9	65.7	66.1	69.5	72.4	75.1	76.1	77.0	77.7	77.6	77.5	77.1	77.1	76.7	75.7	75.3	74.2	72.7	70.5			

TABLE VI.—*Mean pressure for each hour of seventy-fifth meridian time, July, 1894.*

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.	
Abilene, Tex.	28.243	.245	.246	.247	.253	.268	.279	.285	.290	.303	.305	.296	.279	.259	.236	.215	.195	.185	.189	.197	.214	.230	.239	.245	
Albany, N. Y.	29.902	.900	.900	.900	.908	.913	.920	.924	.920	.916	.907	.896	.884	.874	.870	.867	.862	.862	.870	.878	.890	.894	.899	.902	.894
Alpena, Mich.	29.325	.325	.322	.325	.328	.335	.339	.342	.348	.334	.330	.327	.321	.317	.313	.307	.305	.302	.303	.306	.312	.318	.321	.326	.322
Atlanta, Ga.	28.912	.910	.910	.910	.917	.929	.943	.954	.950	.960	.958	.967	.930	.913	.887	.888	.884	.889	.893	.905	.915	.917	.916	.918	
Augusta, Ga.	29.883	.876	.869	.870	.874	.884	.894	.900	.912	.912	.900	.889	.871	.855	.851	.843	.845	.853	.860	.871	.885	.890	.890	.879	
Baltimore, Md.	29.823	.819	.819	.825	.832	.839	.847	.848	.850	.848	.843	.833	.823	.810	.796	.790	.785	.780	.796	.804	.817	.821	.822	.823	.821
Bismarck, N. Dak.	28.240	.245	.243	.247	.253	.258	.262	.266	.268	.267	.261	.255	.241	.232	.225	.214	.205	.201	.206	.214	.226	.230	.236	.236	
Boston, Mass.	29.845	.842	.841	.845	.851	.857	.861	.863	.860	.858	.851	.841	.832	.828	.819	.815	.814	.819	.821	.840	.851	.850	.851	.842	
Buffalo, N. Y.	29.272	.266	.264	.265	.270	.277	.284	.286	.292	.294	.295	.288	.282	.274	.265	.258	.254	.250	.250	.248	.256	.257	.256	.272	
Chicago, Ill.	29.151	.150	.150	.152	.158	.164	.173	.182	.185	.181	.183	.180	.172	.163	.151	.141	.135	.129	.131	.133	.140	.147	.149	.152	
Cincinnati, Ohio	29.377	.375	.374	.379	.389	.401	.411	.419	.416	.413	.404	.393	.377	.361	.347	.337	.335	.336	.343	.357	.366	.370	.375	.378	
Cleveland, Ohio	29.218	.218	.218	.221	.231	.242	.252	.262	.261	.264	.258	.251	.241	.230	.223	.214	.208	.209	.215	.219	.221	.219	.217	.232	
Colorado Spgs., Colo.	24.203	.200	.198	.196	.195	.197	.205	.213	.216	.219	.214	.208	.198	.184	.178	.165	.163	.168	.173	.178	.187	.193	.203	.195	
Columbus, Ohio	29.140	.137	.135	.139	.148	.155	.165	.169	.172	.170	.167	.158	.145	.132	.118	.104	.093	.093	.099	.107	.122	.131	.134	.138	
Denver, Colo.	24.908	.906	.908	.910	.913	.916	.924	.934	.941	.943	.940	.930	.927	.916	.903	.893	.887	.883	.884	.886	.892	.905	.909	.910	
Des Moines, Iowa	29.113	.116	.117	.120	.128	.135	.147	.154	.163	.164	.159	.155	.139	.125	.109	.097	.065	.075	.073	.075	.093	.103	.110	.118	
Detroit, Mich.	29.238	.237	.236	.237	.244	.249	.256	.263	.265	.266	.262	.257	.247	.235	.223	.213	.208	.205	.208	.214	.228	.236	.239	.238	
Dodge City, Kans.	27.405	.405	.404	.403	.406	.408	.414	.419	.425	.420	.419	.410	.407	.405	.404	.408	.404	.406	.416	.431	.453	.462	.454		
Duluth, Minn.	29.240	.237	.239	.242	.245	.255	.267	.272	.273	.267	.264	.257	.245	.238	.231	.224	.219	.216	.215	.218	.221	.234	.239	.241	
Eastport, Me.	29.846	.843	.848	.852	.861	.869	.873	.873	.874	.871	.861	.854	.845	.837	.830	.825	.825	.829	.835	.840	.847	.848	.850	.849	
El Paso, Tex.	26.258	.263	.264	.264	.265	.269	.279	.294	.310	.318	.315	.312	.301	.286	.264	.230	.216	.198	.186	.185	.193	.207	.227	.248	.256
Galveston, Tex.	30.026	.022	.016	.015	.018	.020	.037	.042	.053	.056	.060	.061	.052	.044	.031	.015	.002	.993	.993	.995	.005	.017	.027	.030	.026
Grand Haven, Mich.	29.324	.325	.326	.327	.325	.345	.354	.361	.365	.364	.361	.354	.346	.334	.324	.315	.308	.309	.313	.317	.321	.334			
Havre, Mont.	27.378	.386	.393	.400	.405	.411	.420	.427	.434	.435	.425	.415	.402	.390	.380	.370	.356	.347	.339	.340	.344	.361	.372	.390	
Helena, Mont.	25.945	.953	.960	.963	.960	.973	.979	.978	.990	.991	.988	.983	.972	.960	.948	.934	.920	.909	.903	.898	.900	.908	.929	.950	
Huron, S. Dak.	28.599	.605	.608	.612	.615	.624	.635	.644	.647	.645	.643	.633	.618	.602	.588	.576	.562	.549	.542	.542	.546	.562	.577	.587	.598
Indianapolis, Ind.	29.235	.235	.233	.236	.242	.254	.264	.273	.276	.275	.271	.264	.252	.239	.223	.213	.206	.201	.204	.206	.215	.227	.230	.238	
Jacksonville, Fla.	30.032	.026	.022	.024	.031	.041	.049	.051	.053	.053	.049	.038	.024	.009	.005	.004	.001	.014	.025	.041	.047	.045	.041	.029	
Kansas City, Mo.	29.045	.046	.045	.042	.048	.054	.068	.079	.088	.090	.092	.087	.077	.067	.056	.042	.021	.019	.020	.031	.039	.042	.052		
Key West, Fla.	30.082	.070	.062	.059	.073	.070	.082	.092	.098	.102	.103	.102	.093	.080	.064	.054	.054	.056	.079	.087	.093	.096	.091	.079	
Knoxville, Tenn.	29.040	.038	.036	.040	.048	.058	.068	.079	.081	.082	.079	.068	.054	.037	.027	.014	.008	.007	.013	.019	.028	.041	.043	.044	
Little Rock, Ark.	29.726	.723	.717	.716	.724	.734	.748	.761	.767	.769	.762	.744	.714	.678	.704	.691	.683	.684	.691	.701	.716	.725	.726	.726	
Louisville, Ky.	29.483	.480	.483	.485	.495	.506	.517	.529	.534	.533	.529	.520	.504	.490	.471	.457	.453	.449	.451	.453	.466	.475	.480	.489	
Lynchburg, Va.	29.342	.338	.338	.341	.351	.358	.366	.369	.377	.395	.358	.349	.331	.314	.299	.294	.291	.295	.310	.318	.333	.342	.341	.335	
Marquette, Mich.	29.175	.172	.170	.173	.178	.187	.192	.195	.198	.198	.199	.199	.190	.192	.187	.183	.175	.171	.173	.177	.178	.181	.183		
Memphis, Tenn.	29.712	.707	.703	.705	.711	.722	.736	.744	.752	.756	.755	.752	.741	.725	.711	.700	.693	.685	.691	.696	.706	.712	.714	.718	
Milwaukee, Wis.	29.294	.295	.293	.305	.314	.321	.330	.338	.329	.325	.325	.315	.307	.284	.270	.267	.269	.270	.283	.284	.290	.299			
Moorehead, Minn.	28.955	.958	.963	.965	.970	.976	.979	.979	.980	.984	.982	.979	.964	.954	.945	.939	.925	.920	.917	.921	.941	.944	.948	.955	
Nantucket, Mass.	29.095	.992	.990	.992	.998	.002	.007	.009	.007	.005	.001	.006	.996	.992	.986	.981	.979	.984	.987	.994	.002	.001	.997	.999	
Nashville, Tenn.	29.470	.465	.462	.465	.474	.483	.497	.505	.512	.514	.513	.504	.489	.478	.463	.452	.444	.448	.453	.463	.471	.475			
New Haven, Conn.	29.869	.866	.864	.870	.875	.880	.885	.888	.884	.880	.874	.868	.857	.851	.844	.837	.834	.838	.846	.853	.870	.874	.871	.865	
New Orleans, La.	29.993	.988	.984	.983	.985	.988	.984	.985	.984	.985	.984	.983	.980	.979	.977	.971	.974	.974	.974	.974	.985	.002	.003	.998	
New York, N. Y.	29.812	.809	.807	.809	.815	.820	.824	.831	.828	.827	.825	.819	.811	.803	.792	.785	.780	.783	.789	.797	.811	.814	.815	.809	
Norfolk, Va.	29.984	.976	.975	.977	.985	.993	.001	.006	.005	.005	.004	.007	.986	.974	.962	.958	.952	.957	.961	.969	.982	.988	.985	.982	
Omaha, Neb.	28.865	.864	.866	.866	.869	.879	.887	.895	.901	.906	.905	.904	.895	.883	.877	.867	.864	.860	.864	.860	.864	.867	.872	.872	
Parkersburg, W. Va.	29.376	.375	.376	.378	.386	.397	.407	.414	.414	.414	.410	.402	.395	.374	.357	.348	.340	.337	.340	.346	.357	.365	.372	.377	
Philadelphia, Pa.	29.895	.891	.889	.890	.894	.900	.907	.914	.914	.912	.909	.903	.894	.882	.874	.864	.860	.864	.876	.889	.895	.897	.895		
Pikes Peak, Colo.	18.121	.116	.110	.105	.103	.103	.104	.105	.110	.116	.123	.130	.134	.135	.131	.128	.124	.118	.115	.113	.119	.122	.117		
Pittsburg, Pa.	29.171	.169	.166	.172	.179	.188	.196	.200	.199	.196	.191	.180	.167	.150	.139	.134	.125	.125	.125	.133	.145	.151	.163	.165	
Portland, Oreg.	29.997	.913	.920	.925	.933	.943	.949	.956	.958	.958	.953	.950	.943	.930	.917	.904	.891	.879	.870	.881	.897	.918			
Rochester, N. Y.	29.454	.451	.455	.458	.464	.473	.																		

TABLE VII.—Average wind movement for each hour of seventy-fifth meridian time, July, 1894.

Stations.	1 a.m.	2 a.m.	3 a.m.	4 a.m.	5 a.m.	6 a.m.	7 a.m.	8 a.m.	9 a.m.	10 a.m.	Noon.	1 p.m.	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.	9 p.m.	10 p.m.	11 p.m.	Midnight.	Mean.
Abilene, Tex.	6.8	6.7	6.3	6.2	6.8	6.4	6.4	5.1	6.8	8.6	8.8	7.8	7.7	6.9	7.7	8.0	7.8	8.2	9.0	9.6	8.8	7.1	7.3	7.4
Albany, N. Y.	3.7	3.7	3.4	3.6	3.4	3.6	4.6	5.9	6.1	6.7	7.2	7.3	8.6	8.9	9.1	8.1	7.7	7.4	6.2	4.7	4.3	4.5	3.8	5.7
Alpena, Mich.	4.8	5.0	4.8	5.5	5.7	5.2	6.0	7.1	8.4	9.0	9.8	10.1	10.4	10.8	11.4	10.9	10.3	10.1	8.6	7.3	5.5	4.6	4.4	7.5
Amarillo, Tex.	14.8	14.6	14.1	13.7	13.0	13.2	14.9	14.4	16.1	16.4	16.4	15.0	13.5	13.1	13.1	13.3	13.1	13.7	15.7	16.5	15.7	14.2	15.7	16.0
Atlanta, Ga.	5.9	6.3	6.4	6.1	5.9	5.7	5.0	5.0	6.1	6.7	7.2	7.0	7.4	7.8	8.4	9.0	8.8	8.6	7.4	6.6	6.4	6.2	6.8	6.8
Atlantic City, N. J.	8.4	8.1	7.6	7.6	8.0	8.1	8.6	9.4	10.1	10.1	11.4	12.2	12.6	13.6	13.4	13.5	12.8	12.2	10.8	10.5	10.3	9.9	9.5	10.3
Augusta, Ga.	2.7	2.5	2.5	2.1	2.3	2.0	2.6	3.0	4.0	4.5	4.6	5.1	5.8	5.8	6.6	6.8	6.7	6.2	5.4	3.8	3.2	3.2	2.9	4.1
Baker City, Oreg.	3.0	3.0	3.6	4.5	5.2	5.8	6.4	6.9	6.6	5.5	5.8	6.8	7.1	7.7	8.3	8.4	9.0	5.0	5.4	6.1	6.0	4.6	3.7	4.9
Baltimore, Md.	5.6	5.1	4.6	4.6	4.3	4.2	4.8	5.8	6.8	7.1	7.7	8.7	9.5	9.7	9.4	9.8	9.5	8.3	7.1	6.2	5.5	5.3	5.6	6.7
Bismarck, N. Dak.	5.9	6.4	5.6	4.4	4.7	4.2	4.2	5.7	6.7	7.4	9.3	10.0	11.4	12.4	12.8	12.8	12.7	12.0	12.5	11.3	9.1	7.6	6.3	8.5
Block Island, R. I.	13.8	13.6	13.4	12.9	12.3	12.4	13.2	13.5	13.2	13.8	14.6	16.4	18.3	18.3	19.1	19.5	18.2	17.2	16.6	15.6	15.5	15.4	14.7	14.4
Boston, Mass.	8.8	8.7	8.4	8.2	7.9	7.3	7.4	7.6	8.1	8.6	9.0	9.0	10.5	12.9	12.1	11.5	11.2	11.2	9.9	9.1	8.8	9.0	8.8	9.6
Buffalo, N. Y.	6.7	6.5	6.8	7.2	7.8	7.5	8.2	8.6	9.1	10.4	11.3	12.7	13.6	13.2	13.0	12.8	11.8	11.7	10.1	8.5	7.6	7.5	7.3	6.8
Cairo, Ill.	4.8	4.9	4.8	5.3	5.0	4.9	4.5	5.3	5.7	6.0	7.2	7.7	7.5	8.0	8.0	8.3	8.4	7.7	7.5	5.9	5.0	4.8	4.5	6.1
Cape Henry, Va.	9.3	9.5	9.4	9.2	8.7	8.8	9.3	9.5	9.9	9.8	9.4	9.5	10.3	11.0	12.0	11.5	10.7	10.1	10.2	9.4	9.2	9.2	9.4	9.9
Charleston, S. C.	5.3	5.4	5.3	5.2	5.0	4.5	5.3	6.4	7.5	7.5	8.2	9.6	10.8	12.2	11.8	12.1	11.7	10.6	9.2	8.2	7.5	6.9	6.7	6.0
Charlotte, N. C.	4.1	4.0	4.2	4.3	3.8	3.9	4.0	3.9	4.5	4.5	5.1	4.9	5.5	6.1	6.3	6.6	6.3	5.6	4.9	4.7	4.7	4.7	4.5	5.0
Chattanooga, Tenn.	4.8	4.5	3.6	3.3	3.0	3.2	3.2	3.4	4.2	4.3	5.0	5.4	6.3	7.0	6.7	7.2	8.1	7.5	6.9	5.6	4.9	4.6	3.8	5.0
Cheyenne, Wyo.	8.6	8.5	7.5	6.5	6.1	5.6	5.3	5.1	5.0	6.7	8.0	10.5	10.9	11.2	11.0	11.7	10.7	10.1	9.9	8.3	8.2	9.0	8.5	
Chicago, Ill.	14.6	15.5	15.2	14.9	14.7	14.9	14.6	13.6	13.1	14.6	15.1	15.8	16.7	16.1	15.9	15.9	15.1	14.5	14.3	14.1	14.1	13.3	14.8	
Cincinnati, Ohio.	3.9	3.9	3.9	4.3	4.2	3.4	3.9	5.3	6.1	7.2	8.1	8.4	8.7	9.0	9.3	9.5	9.7	9.3	8.4	5.4	5.1	4.4	6.4	
Cleveland, Ohio.	9.8	10.6	10.9	10.8	9.9	9.6	9.8	9.6	9.9	10.8	12.0	11.8	11.8	12.5	11.8	11.4	9.8	8.5	6.9	7.9	8.7	9.0	10.2	
Colorado Sprgs, Colo.	6.2	5.6	5.7	6.3	6.1	5.3	7.2	7.2	7.9	8.2	8.1	8.7	9.2	9.7	9.5	9.1	10.3	10.2	9.5	8.2	8.0	6.8	6.5	7.8
Columbia, Mo.	3.6	3.3	3.1	2.9	2.9	2.8	3.7	4.5	4.5	5.7	6.3	6.3	6.5	6.7	6.7	6.7	6.5	5.8	4.4	3.0	3.4	3.6	4.7	
Columbus, Ohio.	4.6	4.9	5.0	4.4	4.3	4.4	4.4	5.7	6.8	8.2	9.6	10.8	11.6	12.3	11.6	12.0	11.2	10.2	9.5	7.9	6.7	6.0	5.5	7.8
Concordia, Kans.	5.5	5.4	5.3	4.5	4.0	4.4	4.5	4.9	6.1	7.6	8.3	8.2	8.5	8.5	8.3	8.1	8.5	8.8	8.6	7.1	5.6	4.8	5.2	6.5
Corpus Christi, Tex.	9.5	7.1	6.6	6.1	5.2	5.7	7.7	8.8	9.3	9.4	10.7	13.1	13.1	16.4	16.4	16.4	16.4	15.5	14.7	13.7	12.4	11.1	10.9	
Davenport, Iowa.	5.4	4.5	4.3	4.8	4.9	4.9	5.0	5.1	5.9	7.0	7.5	8.0	8.9	8.8	8.7	9.1	8.9	8.4	7.1	5.4	5.0	5.0	5.5	6.5
Denver, Colo.	5.6	6.0	5.3	5.8	5.4	5.6	5.6	5.0	5.2	4.6	4.9	4.6	4.7	5.3	6.0	6.6	6.7	5.9	5.2	5.2	5.0	7.0	6.4	6.5
Des Moines, Iowa.	4.6	5.0	4.2	4.0	4.6	4.4	4.2	4.5	4.7	5.2	5.7	6.2	7.0	9.2	10.2	10.3	9.9	9.7	9.0	9.0	8.3	7.1	5.8	6.9
Detroit, Mich.	8.3	8.3	8.3	7.7	7.6	7.8	7.5	7.4	8.0	8.3	9.4	10.7	10.9	11.1	12.2	13.1	12.8	11.6	10.1	8.4	8.3	8.1	7.7	9.2
Dodge City, Kans.	9.9	9.6	10.1	8.9	8.5	8.3	7.0	7.2	10.0	12.9	12.0	11.8	11.6	12.1	12.5	12.3	12.6	13.4	13.9	13.0	11.7	11.1	9.6	11.0
Duluth, Minn.	5.1	5.3	5.4	5.5	5.8	6.0	5.1	4.7	5.5	6.3	7.3	7.9	8.4	9.0	9.1	8.9	8.9	8.5	8.5	8.5	8.5	8.5	8.5	6.5
Eastport, Me.	5.8	5.1	5.0	4.2	4.3	3.9	4.3	5.2	5.1	6.0	6.7	8.2	8.5	9.2	9.5	9.8	9.9	8.7	8.6	7.5	6.5	6.2	6.4	6.5
El Paso, Tex.	5.7	5.7	5.4	5.8	5.7	5.2	4.5	4.7	4.7	5.7	6.5	6.1	6.0	6.0	7.1	7.3	7.6	8.3	8.3	8.4	9.2	7.0	5.8	6.5
Erie, Pa.	8.3	8.1	8.3	8.9	8.9	8.4	8.4	8.3	9.0	9.7	10.4	10.1	10.8	10.9	10.8	10.4	9.8	8.7	6.4	6.7	6.9	7.7	7.9	8.8
Eureka, Cal.	4.0	4.2	4.3	3.7	3.4	3.1	3.2	3.5	4.5	4.8	6.4	6.6	7.9	7.8	7.9	8.4	8.8	8.8	8.1	7.3	6.2	5.1	4.0	5.5
Fort Canby, Wash.	9.5	8.9	8.4	8.0	7.9	8.5	8.7	9.3	9.0	9.5	9.6	10.7	11.2	12.1	12.0	12.6	12.6	11.0	11.2	10.8	10.3	10.0	9.1	10.1
Fort Smith, Ark.	4.6	4.5	4.7	4.4	4.3	4.4	3.7	4.5	4.6	4.4	5.3	5.8	6.2	6.4	6.8	7.4	7.4	7.2	6.1	5.2	4.4	4.4	5.5	5.5
Fresno, Cal.	10.8	11.1	11.1	10.2	9.4	8.4	7.9	6.1	4.9	4.9	4.3	4.1	4.2	4.1	4.3	5.0	5.6	5.6	6.3	6.7	6.0	5.8	5.4	6.9
Galveston, Tex.	10.0	9.9	9.6	9.1	8.2	7.4	7.7	7.7	8.2	8.8	9.2	9.0	9.4	10.5	11.4	12.1	12.1	11.6	11.5	10.9	10.2	9.7	9.3	10.0
Grand Haven, Mich.	6.9	6.5	6.3	5.8	5.8	6.1	7.1	7.1	8.2	9.5	10.3	11.7	12.2	12.7	13.2	13.8	13.8	13.0	12.9	12.5	12.0	11.7	11.0	12.5
Green Bay, Wis.	6.2	5.8	5.6	5.7	5.8	5.7	6.6	6.6	8.0	8.1	8.4	9.4	9.0	9.9	9.8	9.9	9.9	8.9	8.6	7.6	6.5	6.5	6.0	7.4
Hannibal, Mo.	6.2	6.6	6.0	5.9	5.0	5.0	5.5	5.5	6.5	7.2	8.2	8.7	8.7	9.4	9.5	10.0	10.2	9.9	9.9	9.3	8.8	8.6	6.0	6.2
Harrisburg, Pa.	4.5	4.3	4.1	3.6	3.7	3.5	3.5	3.6	3.6	3.6	4.0	4.4	4.4	4.4	4.4	4.4	4.4	3.6	3.6	3.6	4.5	4.4	4.6	5.9
Hatteras, N. C.	10.5	10.5	9.7	10.1	9.6	9.7	10.5	11.5	11.8	12.1	12.3	12.6	12.7	12.7	12.7	12.4	12.4	11.7	11.7	10.7	11.2	10.9	9.7	11.2
Havre, Mont.	4.2	5.2	6.5	5.0	4.1	4.5	5.9	7.0	7.5	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	10.2	10.2	10.2	10.2	10.2	5.1	6.9
Helena, Mont.	8.5	7.4	7.3	7.2	7.7	6.4	5.9	5.9	3.9	4.2	4.5	5.4	5.4	6.7	7.4	8.0	8.8	9.3	9.2	8.4	8.1	7.8	7.4	7.4
Huron, S. Dak.	11.2	10.9	9.9	10.0	9.9	8.8	9.4	10.3	11.8	12.8	13.4	13.8	14.4	14.6	14.8	14.3	13.6	13.4	13.1	11.8	10.2	11.5	11.2	11.8
Idaho Falls, Idaho	5.8	5.6	5.0	5.3	5.8	6.0	5.0	5.5	5.7	6.0	5.0	5.4	5.9	6.5	7.0	7.3	8.1	8.5	9.9	10.9	9.9	7.7	6.5	6.9
Indianapolis, Ind.	3.6	3.5	3.4	3.4	3.3	3.6	3.5	4.0	4.6	5.3	6.2													

TABLE VII.—*Average wind movement, etc.—Continued.*

Stations.	Average wind movement, etc.												Average wind movement, etc.												Midnight.	Mean.
	1 s. m.	2 s. m.	3 s. m.	4 s. m.	5 s. m.	6 s. m.	7 s. m.	8 s. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.			
Palestine, Tex.....	4.5	4.4	3.7	3.6	3.1	3.1	2.9	3.6	5.0	5.7	5.9	6.1	6.0	6.3	6.4	6.5	6.9	6.5	5.1	4.4	4.1	4.1	4.1	4.9		
Parkersburg, W. Va..	3.1	2.8	2.5	2.4	2.6	2.8	3.1	3.7	4.2	5.2	5.5	6.8	7.1	7.3	7.5	7.0	6.1	4.9	4.3	3.8	3.5	3.2	2.9	4.4		
Pensacola, Fla.....	5.9	6.4	5.8	6.0	6.4	5.6	6.7	6.9	7.0	7.8	8.5	9.1	11.5	12.6	13.0	13.8	13.0	10.1	9.4	8.0	7.3	6.2	5.7	8.3		
Philadelphia, Pa.....	7.4	8.0	7.5	7.5	7.0	7.2	8.0	8.3	9.0	9.0	10.0	10.5	11.4	12.4	12.5	12.1	10.5	9.3	8.7	8.0	8.6	8.2	8.2	9.3		
Pierre, S. Dak.....	7.6	7.3	7.5	7.5	7.0	7.2	8.0	8.9	9.0	9.0	10.0	10.5	11.4	12.4	12.5	12.1	10.5	9.3	8.7	8.0	8.6	8.2	8.2	9.3		
Pikes Peak, Colo.....	14.7	16.1	16.1	16.4	17.1	17.3	16.5	16.0	14.5	13.0	12.3	10.8	10.0	10.4	11.0	11.4	11.8	13.4	14.0	13.4	14.0	15.1	15.8	16.2	14.1	
Pittsburg, Pa.....	3.7	3.3	3.3	3.5	3.4	3.3	3.4	4.1	4.5	6.0	7.0	6.9	7.9	8.2	8.4	8.4	7.6	7.8	7.1	6.0	5.1	5.0	4.2	4.1	5.6	
Port Angeles, Wash..	5.0	5.5	5.1	4.9	4.4	4.2	4.2	4.6	4.2	4.0	5.5	6.2	6.5	7.2	7.7	8.3	9.5	10.2	10.3	10.7	10.5	8.6	6.6	5.3	5.6	
Port Huron, Mich.....	7.4	8.0	7.5	7.5	7.9	7.8	7.2	8.4	9.7	11.2	11.6	11.9	12.1	11.8	11.9	12.0	10.8	9.8	9.0	8.1	7.7	7.7	7.3	9.2		
Portland, Me.....	3.4	3.7	3.8	3.3	3.6	4.2	3.9	4.6	5.2	7.2	8.2	8.6	8.5	9.2	9.4	9.4	7.6	6.7	5.8	5.5	5.2	4.5	4.1	5.9		
Portland, Oreg.....	10.4	9.3	7.7	7.0	6.6	6.6	6.4	6.4	6.2	7.5	8.8	8.6	8.3	8.6	8.8	8.7	8.6	8.6	9.1	9.5	10.8	10.3	9.7	9.8	8.4	
Pueblo, Colo.....	6.1	5.5	5.2	5.7	5.3	4.6	4.7	4.6	5.2	5.0	6.9	7.4	8.0	8.7	10.1	10.1	10.6	10.3	9.1	8.6	7.4	7.8	6.6	7.1		
Raleigh, N. C.....	3.9	3.5	3.2	3.3	3.3	3.1	3.7	4.4	4.3	4.6	4.7	5.2	5.2	5.1	5.7	5.6	4.9	4.3	3.2	3.5	3.5	4.2	4.1	4.2		
Rapid City, S. Dak....	8.0	8.5	8.1	8.8	8.0	7.2	6.5	6.3	6.1	7.3	8.8	10.0	10.3	9.7	9.9	9.8	10.1	9.5	9.8	8.1	8.6	7.9	8.8	8.3		
Red Bluff, Cal.....	4.4	4.4	4.8	4.5	4.4	4.2	3.3	3.5	3.4	3.8	5.2	5.5	5.4	5.5	5.4	5.0	5.9	6.4	6.5	6.3	6.2	6.1	5.3	5.1		
Rochester, N. Y.....	5.7	5.3	5.9	5.8	6.4	6.2	6.3	7.3	7.9	8.0	8.3	9.4	11.1	10.2	10.2	10.2	9.7	9.1	7.8	7.1	5.9	5.1	5.2	7.3		
Roseburg, Oreg.....	1.8	1.3	1.0	1.0	1.0	0.8	0.7	0.9	1.7	2.1	2.4	3.4	3.6	3.9	5.4	6.1	6.8	7.8	8.0	8.6	8.3	5.9	3.4	3.6		
Sacramento, Cal.....	9.5	9.1	10.1	10.0	9.9	9.0	8.9	8.4	7.7	7.6	7.0	6.8	6.3	6.5	6.6	7.0	7.9	8.4	9.2	10.1	11.0	10.8	11.1	10.7		
St. Louis, Mo.....	8.1	8.2	8.1	7.6	7.0	6.5	6.4	7.4	8.0	8.6	8.7	9.4	10.1	11.2	10.9	11.7	11.0	10.5	10.2	9.3	8.9	8.1	8.5	8.9		
St. Paul, Minn.....	6.0	5.5	5.5	5.5	5.2	5.3	5.5	5.7	6.0	7.1	8.3	9.6	10.3	10.2	10.4	10.1	9.6	9.8	9.5	7.8	5.9	5.2	5.5	7.3		
St. Vincent, Minn....	5.4	5.7	5.8	5.6	5.9	5.5	5.5	6.0	6.5	7.8	8.8	8.7	9.2	9.6	9.6	10.5	10.7	9.7	9.1	7.4	5.6	5.4	5.6	7.3		
Salt Lake City, Utah....	4.3	4.3	4.7	3.8	3.4	3.7	3.7	3.4	3.1	3.6	5.0	5.2	5.2	5.6	6.2	6.8	7.5	7.9	8.6	8.1	8.5	8.3	5.5	5.6		
San Antonio, Tex.....	6.5	5.4	4.8	3.5	3.0	2.6	2.4	2.5	3.5	4.4	4.9	5.3	5.7	5.9	6.3	6.7	7.7	8.5	8.7	9.0	8.2	7.7	7.9	5.8		
San Diego, Cal.....	2.4	2.0	2.2	2.0	2.0	2.4	2.3	2.9	2.5	3.0	3.7	5.4	7.3	8.3	9.4	9.5	9.8	9.5	8.7	8.0	7.2	6.4	5.1	5.2		
Sandusky, Ohio.....	7.8	7.4	7.3	6.9	6.9	6.4	6.0	6.4	7.7	7.7	7.6	8.9	8.5	8.5	8.5	8.3	7.5	7.5	6.8	6.5	6.9	7.3	7.4			
San Francisco, Cal....	14.2	12.1	11.3	10.6	10.5	9.5	8.3	8.4	8.2	8.7	9.1	9.5	10.1	13.0	16.2	19.6	22.6	23.8	25.1	25.5	24.8	22.6	20.5	17.5	15.1	
Santa Fe, N. Mex....	7.2	6.7	5.8	5.1	4.7	4.2	3.9	3.5	3.6	4.3	5.2	5.5	6.1	6.2	6.8	8.1	9.3	10.0	10.5	10.4	10.0	8.5	8.0	7.5	6.7	
Sault Ste. Marie, Mich.	3.5	3.7	3.2	3.9	4.0	3.9	4.3	5.0	5.4	6.5	8.1	9.0	10.6	11.0	10.9	10.5	10.7	9.3	8.0	6.4	5.2	4.6	4.0	3.3	6.5	
Savannah, Ga.....	4.6	4.6	4.6	4.6	5.0	5.1	5.3	6.2	7.0	7.6	8.5	8.5	9.1	11.0	11.5	11.2	10.5	9.6	8.4	7.4	6.3	5.7	5.0	7.2		
Seattle, Wash.....	2.5	2.5	2.3	2.6	2.4	2.3	2.0	2.5	2.7	3.4	4.0	4.2	5.1	6.2	6.0	6.5	6.8	7.0	7.4	7.3	6.3	5.6	4.0	4.5		
Shreveport, La.....	4.7	4.5	4.1	3.6	3.9	3.6	4.0	3.2	4.2	4.5	5.1	5.5	6.0	7.0	6.7	7.0	7.5	6.7	6.1	5.3	4.2	4.5	4.7	4.8	5.1	
Sioux City, Iowa....	7.3	7.5	7.5	8.1	8.2	8.9	8.1	8.2	8.3	8.3	9.7	10.7	11.4	11.9	12.7	13.4	15.4	13.6	13.3	11.4	10.6	9.3	8.8	8.5		
Southport, N. C.....	10.5	9.9	9.6	9.6	8.5	8.3	7.9	8.5	8.9	9.8	10.5	10.9	12.2	13.2	13.8	14.2	14.8	14.8	13.7	12.5	11.5	10.7	11.0	10.3	11.1	
Spokane, Wash.....	4.3	3.7	4.2	3.7	3.6	3.9	4.1	4.2	4.5	5.0	6.1	7.1	7.3	7.2	7.6	7.5	7.6	7.5	7.5	7.4	6.2	5.2	4.6	5.7		
Springfield, Ill.....	5.8	5.6	5.3	5.3	5.2	4.9	4.9	5.3	5.8	6.5	6.9	7.0	7.5	8.3	8.1	7.7	8.1	7.6	7.3	6.4	6.0	5.5	6.3	6.4		
Springfield, Mo.....	7.2	7.0	7.0	7.8	7.1	7.3	6.6	6.5	6.9	7.4	8.3	8.9	9.2	9.8	10.1	10.4	10.7	10.2	9.8	9.6	7.4	7.1	7.8	7.7		
Tampa, Fla.....	3.8	3.6	3.5	3.6	3.6	3.6	4.2	4.8	5.8	5.8	6.4	6.7	6.7	7.6	8.7	8.5	8.0	8.0	7.1	6.1	4.5	4.3	3.8	3.7	5.4	
Tatooch Island, Wash.	7.4	7.9	7.9	8.3	8.0	8.7	8.1	8.5	9.5	8.9	8.7	9.7	11.0	10.0	10.8	10.3	10.2	10.1	10.0	9.0	9.2	8.6	8.2	8.0	9.1	
Titusville, Fla.....	8.0	7.0	6.9	7.2	7.0	6.6	7.1	7.8	9.4	9.6	10.4	11.2	13.4	14.0	15.1	15.3	15.3	14.2	11.4	9.7	8.1	6.9	7.6	9.9		
Toledo, Ohio.....	7.5	7.7	7.4	7.8	7.5	7.4	7.8	8.0	8.3	8.5	9.2	10.6	11.8	11.5	11.2	10.5	10.5	9.3	9.2	8.5	8.7	8.2	9.2	9.0		
Tucson, Ariz.....	4.8	3.9	4.1	4.5	3.5	3.6	3.1	3.2	3.7	3.2	3.4	4.1	4.3	4.9	5.4	6.5	7.0	7.4	8.0	6.9	5.6	6.5	6.0	4.9		
Valentine, Nebr.....	8.6	8.0	7.9	7.4	6.7	6.2	6.2	6.8	6.5	6.7	8.0	10.7	11.2	11.4	10.5	10.5	11.2	12.1	12.3	11.8	12.0	11.4	10.1	9.6		
Vicksburg, Miss.....	5.2	4.9	4.6	4.5	4.7	4.5	4.5	4.6	4.9	5.2	5.0	5.6	5.7	6.4	6.8	6.9	7.1	6.4	5.9	5.6	5.8	6.0	5.9	5.2		
Vineyard Haven, Mass.	7.7	7.7	7.8	7.8	7.6	7.2	7.6	8.0	8.7	9.1	9.3	9.4	9.8	10.6	11.8	11.5	11.2	10.5	10.5	9.3	9.2	8.6	8.2	9.2		
Walla Walla, Wash....	5.9	5.8	5.4	4.7	4.7	4.7	4.6	4.5	4.3	4.5	5.6	6.1	6.3	6.0	6.1	6.2	6.0	6.3	6.1	5.4	4.9	5.0	5.9	5.5		
Washington, D. C.....	3.8	3.6	3.2	3.2	3.5	3.3	3.5	4.7	5.0	6.1	6.9	7.5	8.2	8.3	8.4	8.5	7.6	7.4	6.5	4.8	4.1	3.7	3.8	5.4		
Wichita, Kans.....	6.3	5.9	5.9	5.9	6.2	6.4	5.8	5.9	6.5	6.7	7.4	7.9	8.0	8.2	8.5	7.8	7.6	6.6	5.7	5.6	5.8	6.0	5.9	6.7		
Williston, N. Dak....	6.3	5.7	6.0	5.9	4.6	4.9	3.8	4.2	5.4	6.2	7.8	9.2	10.9	12.3	12.4	11.8	11.8	10.8	10.2	10.5	8.2	5.4	7.8			
Wilmington, N. C.....	5.7	5.8	5.3	5.3	4.																					

TABLE VIII.—*Pervailing and resultant winds from self-registers for July, 1894.*

Number.	Station.	Prevailing wind.		Total movement.		Resultant direction.		Resultant movement.		Azimuth of resultant movement minus direction.	Ratio of resultant movement to total movement.	
		Direction from.	Duration.	Monthly.	Hourly average.	Direction from.	Duration.	Average hourly velocity.	Direction from.			
		(1)	(2)	(3) Hours.	(4) Miles.	(5) Miles.	(6)	(7) Hours.	(8) Miles.	(9)	(10) Miles.	(11) °	(12)
1	Eastport, Me.	sw.	248	4,845	6.5	s. 36 w.	351	7.0	s. 33 w.	2,442	— 3	0.504
2	Portland, Me.	s.	166	4,370	5.9	s. 30 w.	230	7.6	s. 20 w.	1,748	— 10	0.400
4	Boston, Mass.	sw.	238	6,974	9.4	s. 51 w.	255	11.6	s. 53 w.	2,945	+ 2	0.422
5	Nantucket, Mass.	w.	309	7,026	9.4	s. 81 w.	429	8.5	s. 80 w.	3,048	— 1	0.519
6	New Haven, Conn.	sw.	245	5,116	6.9	s. 47 w.	274	7.7	s. 34 w.	2,100	— 13	0.410
10	Albany, N. Y.	s.	242	4,250	5.7	s. 27 w.	167	5.9	s. 35 w.	977	+ 5	0.230
11	New York, N. Y.	sw.	284	6,345	8.5	s. 40 w.	334	8.4	s. 42 w.	2,800	+ 2	0.441
13	Philadelphia, Pa.	sw.	283	6,889	9.3	s. 62 w.	289	9.6	s. 62 w.	2,700	0	0.401
15	Baltimore, Md.	sw.	188	4,960	6.7	s. 47 w.	216	6.0	s. 58 w.	1,299	+ 11	0.262
16	Washington, D. C.	s.	261	4,004	5.4	s. 20 w.	241	4.1	s. 34 w.	984	+ 14	0.246
17	Lynchburg, Va.	sw.	132	2,621	3.5	s. 52 w.	128	3.7	s. 57 w.	479	+ 5	0.183
18	Norfolk, Va.	sw.	273	6,106	5.2	s. 20 w.	259	5.7	s. 20 w.	3,544	0	0.580
24	Wilmington, N. C.	sw.	289	5,428	7.3	s. 17 w.	421	6.5	s. 17 w.	2,740	0	0.505
26	Augusta, Ga.	s.	129	3,040	4.1	s. 18 e.	142	4.3	s. 20 e.	610	+ 2	0.201
27	Savannah, Ga.	sw.	182	5,325	7.2	s. 16 w.	237	6.3	s. 2 w.	1,485	— 14	0.279
28	Jacksonville, Fla.	sw.	184	5,813	7.8	s. 9 e.	314	9.1	s. 1 w.	2,871	+ 10	0.404
30	Key West, Fla.	se.	280	4,926	6.6	s. 54 e.	466	6.6	s. 56 e.	3,064	+ 2	0.622
33	Atlanta, Ga.	e.	134	5,000	6.8	s. 64 e.	96	4.8	s. 82 e.	456	— 18	0.090
38	Vicksburg, Miss.	se.	137	3,887	5.2	s. 63 e.	7	28.3	s. 12 w.	198	+ 75	0.051
39	New Orleans, La.	s.	121	4,230	5.7	s. 58 e.	30	13.9	s. 36 e.	418	— 86	0.099
42	Little Rock, Ark.	e.	134	3,935	5.3	n. 84 e.	53	13.3	n. 65 e.	705	— 19	0.179
44	Galveston, Tex.	s.	210	7,222	9.7	s. 3 e.	366	9.4	s. 2 e.	3,455	— 1	0.476
48	Knoxville, Tenn.	ne.	159	2,843	3.8	n. 15 e.	157	4.2	n. 5 e.	654	— 10	0.234
49	Memphis, Tenn.	nw.	144	3,655	4.9	n. 30 w.	53	6.2	n. 12 e.	328	+ 42	0.090
50	Nashville, Tenn.	se.	143	2,999	4.0	s. 85 e.	42	5.1	n. 28 e.	215	— 67	0.072
52	Louisville, Ky.	s.	182	4,537	6.1	s. 24 w.	98	4.0	s. 68 w.	389	+ 44	0.086
53	Indianapolis, Ind.	sw.	191	3,714	5.0	s. 89 w.	235	5.0	s. 87 w.	1,166	— 2	0.314
54	Cincinnati, Ohio.	nw.	151	4,729	6.4	s. 64 w.	126	11.4	n. 82 w.	1,438	+ 34	0.304
55	Columbus, Ohio.	sw.	123	5,817	7.8	s. 77 w.	103	17.2	s. 88 w.	1,770	+ 11	0.304
56	Pittsburg, Pa.	nw.	175	4,093	5.5	s. 60 w.	180	6.8	s. 77 w.	1,232	— 17	0.301
58	Buffalo, N. Y.	w.	237	7,023	9.4	s. 72 w.	368	12.0	s. 77 w.	4,400	+ 5	0.627
60	Rochester, N. Y.	sw.	305	5,398	7.3	s. 57 w.	256	9.5	s. 64 w.	2,440	+ 7	0.452
62	Cleveland, Ohio.	se.	174	7,570	10.2	s. 36 w.	114	12.8	s. 62 w.	1,462	— 26	0.193
64	Toledo, Ohio.	w.	171	6,730	9.0	n. 28 w.	227	10.3	n. 80 w.	2,335	+ 2	0.347
65	Detroit, Mich.	sw.	235	6,877	9.2	s. 84 w.	178	13.4	s. 79 w.	2,379	— 5	0.346
66	Alpena, Mich.	se.	192	5,594	7.5	s. 75 w.	52	19.7	n. 75 w.	1,022	+ 30	0.183
67	Grand Haven, Mich.	sw.	218	6,322	8.5	s. 78 w.	133	23.1	s. 78 w.	3,066	— 24	0.485
68	Marquette, Mich.	nw.	164	6,809	9.3	n. 45 w.	238	10.4	n. 88 w.	2,464	— 43	0.357
70	Sault Ste. Marie, Mich.	nw.	272	2,803	3.6	n. 70 w.	191	10.6	n. 65 w.	2,028	— 5	0.724
71	Chicago, Ill.	ne.	181	11,020	14.8	s. 30 e.	52	20.8	s. 25 w.	1,082	+ 55	0.098
72	Milwaukee, Wis.	sp.	122	6,369	8.6	s. 33 w.	39	23.0	s. 63 w.	898	+ 30	0.141
74	Duluth, Minn.	nw.	190	4,866	6.5	n. 2 e.	212	9.5	n. 27 w.	2,056	— 29	0.423
75	Moorhead, Minn.	s.	250	6,367	8.6	s. 54 w.	361	3.4	s. 50 w.	1,222	— 4	0.192
77	Bismarck, N. Dak.	nw.	184	6,346	8.5	n. 17 w.	69	18.3	n. 36 w.	1,265	+ 11	0.199
79	Saint Paul, Minn.	se.	185	5,438	7.3	s. 28 w.	204	8.2	s. 49 w.	1,650	+ 11	0.309
81	Davenport, Iowa.	sw.	256	4,858	6.5	s. 49 w.	204	6.5	s. 60 w.	1,322	+ 11	0.272
82	Des Moines, Iowa.	sw.	173	5,160	6.9	s. 43 w.	93	11.6	s. 11 w.	108	+ 32	0.021
83	Saint Louis, Mo.	s.	555	6,609	8.9	s. 13 w.	65	12.6	s. 38 w.	820	+ 25	0.124
90	Kansas City, Mo.	se.	236	5,197	7.0	s. 73 e.	283	6.6	s. 65 e.	1,879	— 8	0.362
92	Omaha, Nebr.	se.	194	5,393	7.2	s. 52 e.	134	11.6	s. 40 e.	1,557	— 12	0.289
96	Huron, S. Dak.	se.	207	8,797	11.8	s. 2 w.	91	23.7	s. 13 e.	2,154	— 15	0.245
98	Havre, Mont.	nw.	187	5,152	6.9	n. 73 w.	274	8.6	s. 78 w.	2,375	— 5	0.401
100	Helena, Mont.	sw.	272	5,498	7.4	s. 79 w.	306	9.4	s. 70 w.	2,568	— 9	0.522
106	Colorado Springs, Colo.	n.	351	5,782	7.8	n. 1 e.	204	9.6	n. 1 w.	2,010	— 2	0.348
107	Denver, Colo.	s.	174	4,802	6.5	s. 79 w.	159	6.7	s. 86 w.	1,071	+ 7	0.223
108	Pikes Peak, Colo.	ne.	159	10,454	14.1	n. 8 w.	95	30.7	n. 80 w.	2,916	— 72	0.279
111	Dodge City, Kans.	se.	286	8,192	11.0	s. 41 e.	379	13.5	s. 34 e.	5,099	+ 7	0.622
114	Abilene, Tex.	se.	260	5,491	7.4	s. 39 e.	305	8.0	s. 39 e.	2,444	— 0	0.445
116	El Paso, Tex.	se.	263	4,834	6.5	s. 77 e.	358	5.2	s. 86 e.	1,572	— 9	0.387
117	Santa Fe, N. Mex.	se.	206	5,017	6.7	s. 50 e.	188	9.1	s. 38 e.	1,710	+ 12	0.341
119	Yuma, Ariz.	sw.	208	5,295	7.1	s. 5 w.	304	9.7	s. 15 w.	2,951	+ 10	0.557
122	Salt Lake City, Utah.	se.	164	4,167	5.6	s. 67 e.	112	1.6	n. 8 w.	174	— 121	0.042
125	Spokane, Wash.	sw.	191	4,231	5.7	s. 16 e.	189	10.1	s. 10 w.	1,916	+ 26	0.453
130	Seattle, Wash.	nw.	172	3,373	4.5	n. 63 w.	203	4.8	n. 70 w.	970	— 7	0.290
132	Portland, Oregon.	nw.	418	6,278	8.4	s. 37 w.	514	8.7	n. 38 w.	4,448	— 1	0.709
133	Roseburg, Oregon.	nw.	238	2,714	3.6	n. 31 w.	361	5.6	n. 26 w.	2,010	+ 5	0.742
137	San Francisco, Cal.	sw.	668	11,211	15.1	s. 40 w.	699	15.6	s. 44 w.	10,925	+ 4	0.974
140	San Diego, Cal.	w.	264	3,589	5.2	n. 78 w.	512	6.0	n. 82 w.	3,081	— 4	0.792

TABLE IX.—Resultant winds from observations at 8 a. m. and 8 p. m., daily, during July, 1894.

STATE WEATHER SERVICES.

The following table summarizes the more prominent climatological features given in the reports for July by the directors of the respective State Weather Services:

State.	Temperature.				Precipitation.					
	Maximun.	Minimun.	Station.	Station.	Monthly ranges.		Mean departure.	Minimum.		
					Depart.	Date.				
Alabama.....	o	-5.7	103	4	Tuscaloosa.....	56	* Maple Grove†.....	46		
Alaska.....	o	118	25	Parker.....	45	11 Fort Apache.....	54	Newburg.....	o	
Arizona.....	+2.0	108	21	Dallas.....	51	24 Keesees Ferry.....	54	Rye Springs.....	37	
Arkansas.....	-1.8	123	25	Vulcan Springs.....	35	27 Boca.....	61	Turlock.....	18	
California.....	+1.8	108	28	Climax.....	28	* Canyon†.....	55	Steamboat Springs.....	32	
Colorado.....	-1.0	108	28	Cheyenne Wells.....	28	* Gantony†.....	53	N. Grottoor Date.....	37	
Connecticut.....	+1.5	100	29	Middletown.....	45	* Newark†.....	40	New London.....	23	
Delaware.....	-1.0	100	29	Wilmington.....	50	10 Newark.....	40	Milford†.....	39	
District of Columbia.....	-2.3	95	* Archer†.....	64	28 New Smyrna.....	20	Hypolux.....	15	Moseley Hall.....	15-30
Florida.....	-2.3	95	* Archer†.....	64	10 Everett.....	50	10 Athens.....	41	Marshallville F.....	14-66
Georgia.....	-3.0	100	30	Fleming.....	50	26 Payette.....	32	Garden Valley.....	24	
Idaho.....	-1.0	107	22	Payette.....	41	21 Bloomington.....	41	Bloomington.....	45	
Illinoia.....	+0.4	107	25	Olivey.....	41	19 Angola.....	41	Hammond.....	23	
Indiana.....	+0.3	104	19	Angola.....	41	22 Hammond.....	41	Huntington.....	15-30	
Indian Territory.....										
Iowa.....	+2.3	110	26	Lowan.....	39	14 Galva.....	57	Centerville.....	1-3	
Kansas.....	-0.3	116	28	Ulysses.....	42	21 Morland.....	52	Elba.....	17	
Kentucky.....	-1.5	105	31	Carrollton.....	43	8 Sandy Hook.....	58	Port Bowle.....	17	
Louisiana.....	-1.7	107	4	Girard.....	55	5 Girard.....	52	Windlow.....	17	
Maine.....	+0.4	100	20	Lewiston.....	42	27 Farmington.....	53	Eureka.....	18	
Maryland.....	0.0	100	4	Lewiston.....	42	27 Farmington.....	53	Eureka.....	18	
Massachusetts.....	-2.0	106	20	Ulligge Park†.....	34	9 Sunnyside.....	58	Elba.....	17	
Michigan.....	-0.4	102	4	Hesitant Hill.....	40	29 Ludlow†.....	55	Elba.....	17	
Louisiana.....	-1.6	105	27	Berlin.....	40	4 Graying†.....	55	Elba.....	17	
Maine.....	+0.4	107	4	Wabash.....	39	31 Clarkdale†.....	53	Elba.....	17	
Mississippi.....	-2.5	107	*	Vaidin†.....	53	10 Clarkdale†.....	53	Elba.....	17	
Missouri.....	-0.8	109	27	Harrisonville.....	42	23 Hogan.....	53	Elba.....	17	
Montana.....	-1.0	112	24	Glenive.....	32	28 Fort Robinson.....	43	Elba.....	17	
Nebaska.....	+1.9	114	26	Sainte Agene'y†.....	32	28 Stoney†.....	63	Elba.....	17	
Novada.....	-0.0	108	7	Dowdney.....	32	27 Berlin Mills†.....	33	Elba.....	17	
New Hampshire.....	+0.3	99	28	North Conway.....	33	10 Franklinville.....	44	Elba.....	17	
New Jersey.....	+1.2	106	19	Somerville.....	44	10 Franklinville.....	57	Elba.....	17	
New Mexico.....	-1.0	104	19	South Kortright.....	38	26 Hala Peak.....	59	Elba.....	17	
New York.....	+1.3	102	20	Factoryville.....	37	9 Saxon.....	61	Elba.....	17	
North Carolina.....	+1.6	103	13	Bowing Rock.....	42	11 Providence n.....	63	Elba.....	17	
Rhode Island.....	+3.1	107	13	Napoleon.....	38	30 Napoleon.....	66	Elba.....	17	
South Carolina.....	-1.9	100	3	Greenwood.....	36	9 Heudea.....	65	Elba.....	17	
South Dakota.....	-1.0	105	*	Brattelboro†.....	55	11 Castilewood†.....	62	Elba.....	17	
Tennessee.....	-1.8	114	3	Frankfort†.....	37	12 Purcell.....	67	Elba.....	17	
Texas.....	-1.1	103	1	Conington b.....	49	23 Byrdstown.....	68	Elba.....	17	
Utah.....	-1.3	115	3	Panter.....	42	30 Hartley.....	64	Elba.....	17	
North Dakota.....	+3.1	109	13	St. George.....	26	7 Scofield.....	70	Elba.....	17	
Ohio.....	-1.5	105	*	Amadarko.....	49	23 Covington b.....	65	Elba.....	17	
Oklahoma.....	-1.2	114	3	Waterferry.....	48	8 Burns.....	62	Elba.....	17	
Pennsylvania.....	-1.3	104	23	On City†.....	28	28 Lock Haven.....	72	Elba.....	17	
Virginia.....	-1.3	103	19	Huntingdon.....	31	13 Kingston.....	49	Elba.....	17	
West Virginia.....	-1.0	103	19	Providence n.....	38	30 Kingston.....	49	Elba.....	17	
Wisconsin.....	+0.2	107	28	Pover†.....	36	9 Greenwood.....	55	Elba.....	17	
Wyoming.....	-2.0	98	14	Greenwood.....	36	9 Heudea.....	65	Elba.....	17	

* Two or more days.

† At other points in the State.

Alabama.....	o	103	4	Tuscaloosa.....	56	* Maple Grove†.....	46	Newburg.....	o		
Alaska.....	o	118	25	Parker.....	45	11 Fort Apache.....	54	Rye Springs.....	37		
Arizona.....	+2.0	108	21	Dallas.....	51	24 Keesees Ferry.....	54	Turlock.....	18		
Arkansas.....	-1.8	123	25	Vulcan Springs.....	35	27 Boca.....	61	River Bend.....	32		
California.....	+1.8	108	28	Climax.....	28	* Canyon†.....	55	Steamboat Springs.....	32		
Colorado.....	-1.0	108	28	Cheyenne Wells.....	28	* Gantony†.....	53	N. Grottoor Date.....	37		
Connecticut.....	+1.5	100	29	Middletown.....	45	* Newark†.....	40	New London.....	23		
Delaware.....	-1.0	100	29	Wilmington.....	50	10 Newark.....	40	Milford†.....	39		
District of Columbia.....	-2.3	95	* Archer†.....	64	10 Everett.....	50	10 Athens.....	41	Bar Harbor†.....	44	
Florida.....	-2.3	95	* Archer†.....	64	26 Payette.....	32	21 Bloomington.....	41	Garden Valley.....	24	
Georgia.....	-3.0	100	30	Fleming.....	50	26 Everett.....	50	10 Newark.....	40	Holiday.....	30
Idaho.....	-1.0	107	22	Payette.....	41	21 Bloomington.....	41	Holiday.....	30	Bar Harbor†.....	44
Illinoia.....	+0.4	107	25	Olivey.....	41	19 Angola.....	41	Holiday.....	30	Holiday.....	30
Indiana.....	+0.3	104	19	Angola.....	41	22 Hammond.....	41	Holiday.....	30	Holiday.....	30
Indian Territory.....											
Iowa.....	+2.3	110	26	Lowan.....	39	14 Galva.....	57	Centerville.....	1-3		
Kansas.....	-0.3	116	28	Ulysses.....	42	21 Morland.....	52	Elba.....	17		
Kentucky.....	-1.5	105	31	Carrollton.....	43	8 Sandy Hook.....	58	Port Bowle.....	17		
Louisiana.....	-1.7	107	4	Girard.....	55	5 Girard.....	52	Windlow.....	17		
Maine.....	+0.4	100	20	Lewiston.....	42	27 Farmington.....	53	Eureka.....	18		
Maryland.....	0.0	100	4	Lewiston.....	42	27 Farmington.....	53	Eureka.....	18		
Massachusetts.....	-2.0	106	20	Ulligge Park†.....	34	9 Sunnyside.....	58	Elba.....	17		
Michigan.....	-0.4	102	4	Hesitant Hill.....	40	29 Ludlow†.....	55	Elba.....	17		
Louisiana.....	-1.6	105	27	Berlin.....	40	4 Graying†.....	55	Elba.....	17		
Maine.....	+0.4	107	4	Wabash.....	39	31 Clarkdale†.....	53	Elba.....	17		
Mississippi.....	-2.5	107	*	Vaidin†.....	53	10 Clarkdale†.....	53	Elba.....	17		
Missouri.....	0.0	100	4	Holloman.....	42	23 Hogan.....	53	Elba.....	17		
Montana.....	-1.0	106	27	Glenive.....	32	28 Fort Robinson.....	43	Elba.....	17		
Nebaska.....	+1.9	114	26	Sainte Agene'y†.....	32	28 Stoney†.....	63	Elba.....	17		
Novada.....	-0.0	108	7	Dowdney.....	32	27 Berlin Mills†.....	33	Elba.....	17		
New Hampshire.....	+0.3	99	28	North Conway.....	33	10 Franklinville.....	44	Elba.....	17		
New Jersey.....	+1.2	106	19	Somerville.....	44	10 Franklinville.....	57	Elba.....	17		
New Mexico.....	-1.0	104	19	South Kortright.....	38	26 Hala Peak.....	59	Elba.....	17		
New York.....	+1.3	102	20	Factoryville.....	37	9 Saxon.....	61	Elba.....	17		
North Carolina.....	+1.6	103	13	Bowing Rock.....	42	11 Providence n.....	63	Elba.....	17		
Rhode Island.....	+3.1	107	13	Napoleon.....	38	30 Napoleon.....	66	Elba.....	17		
South Carolina.....	-1.9	100	3	Greenwood.....	36	9 Heudea.....	65	Elba.....	17		
South Dakota.....	-1.0	105	*	Brattelboro†.....	55	11 Castilewood†.....	62	Elba.....	17		
Tennessee.....	-1.2	114	3	Frankfort†.....	37	12 Purcell.....	67	Elba.....	17		
Texas.....	-1.1	103	1	Conington b.....	49	23 Byrdstown.....	68	Elba.....	17		
Utah.....	-1.3	115	3	Panter.....	42	30 Hartley.....	64	Elba.....	17		
North Dakota.....	+3.1	109	13	St. George.....	26	7 Scofield.....	70	Elba.....	17		
Ohio.....	-1.5	105	*	Amadarko.....	49	23 Covington b.....	65	Elba.....	17		
Oklahoma.....	-1.2	114	3	Waterferry.....	48	8 Burns.....	62	Elba.....	17		
Pennsylvania.....	-1.3	104	23	On City†.....	28	28 Lock Haven.....	72	Elba.....	17		
Virginia.....	-1.3	103	19	Huntingdon.....	31	13 Kingston.....	49	Elba.....	17		
West Virginia.....	-1.0	103	19	Providence n.....	38	30 Kingston.....	49	Elba.....	17		
Wisconsin.....	+0.2	107	28	Pover†.....	36	9 Greenwood.....	55	Elba.....	17		
Wyoming.....	-2.0	98	14	Greenwood.....	36	9 Heudea.....	65	Elba.....	17		

Alabama.....	o	103	4	Tuscaloosa.....	56	* Maple Grove†.....	46	Newburg.....	o		
Alaska.....	o	118	25	Parker.....	45	11 Fort Apache.....	54	Rye Springs.....	37		
Arizona.....	+2.0	108	21	Dallas.....	51	24 Keesees Ferry.....	54	Turlock.....	18		
Arkansas.....	-1.8	123	25	Vulcan Springs.....	35	27 Boca.....	61	River Bend.....	32		
California.....	+1.8	108	28	Climax.....	28	* Canyon†.....	55	Steamboat Springs.....	32		
Colorado.....	-1.0	108	28	Cheyenne Wells.....	28	* Gantony†.....	53	N. Grottoor Date.....	37		
Connecticut.....	+1.5	100	29	Middletown.....	45	* Newark†.....	40	New London.....	23		
Delaware.....	-1.0	100	29	Wilmington.....	50	10 Newark.....	40	Milford†.....	39		
District of Columbia.....	-2.3	95	* Archer†.....	64	10 Everett.....	50	10 Athens.....	41	Bar Harbor†.....	44	
Florida.....	-2.3	95	* Archer†.....	64	26 Payette.....	32	21 Bloomington.....	41	Garden Valley.....	24	
Georgia.....	-3.0	100	30	Fleming.....	50	26 Everett.....	50	10 Newark.....	40	Holiday.....	30
Idaho.....	-1.0	107	22	Payette.....	41	21 Bloomington.....	41	Holiday.....	30	Bar Harbor†.....	44
Illinoia.....	+0.4	104	19	Olivey.....	41	19 Angola.....	41	Holiday.....	30	Holiday.....	30
Indiana.....	+0.3	104	19	Angola.....	41	22 Hammond.....	41	Holiday.....	30	Holiday.....	30
Indian Territory.....											
Iowa.....	+2.3	110	26	Lowan.....	39	14 Galva.....	57	Centerville.....	1-3		
Kansas.....	-0.3	116	28	Ulysses.....	42	21 Morland.....	52	Elba.....	17		
Kentucky.....	-1.5	105	31	Carrollton.....	43	8 Sandy Hook.....	58	Port Bowle.....	17		
Louisiana.....	-1.7	107	4	Girard.....	55	5 Girard.....	52	Windlow.....	17		
Maine.....	+0.4	100	20	Lewiston.....	42	27 Farmington.....	53	Eureka.....	18		
Maryland.....	0.0	100	4	Lewiston.....	42	27 Farmington.....	53	Eureka.....	18		
Massachusetts.....	-2.0	106	20	Ulligge Park†.....	34	9 Sunnyside.....	58	Elba.....	17		
Michigan.....	-0.4	102	4	Hesitant Hill.....	40	29 Ludlow†.....	55	Elba.....	17		
Louisiana.....	-1.6	105	27	Berlin.....	40	4 Graying†.....	55	Elba.....	17		
Maine.....	+0.4	107	4	Wabash.....	39	31 Clarkdale†.....	53	Elba.....	17		
Mississippi.....	-2.5	107	*	Vaidin†.....	53</						